Metalsmith

Fall 85 Volume Five Number Four $6.00

Master Metalsmith: Allan Adler
Production Jewelers 4
VO Galerie
Doublée Making
Gary Griffin

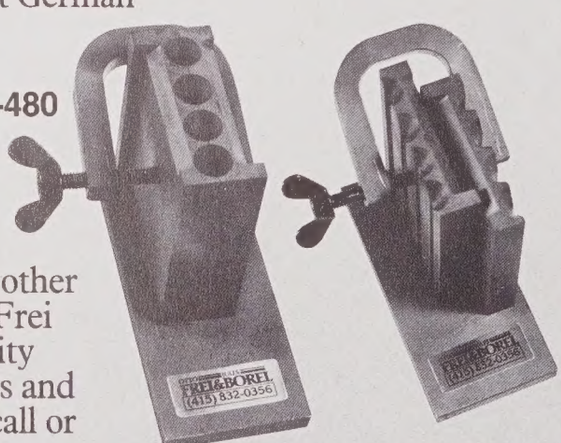
The Journal of the Society of North American Goldsmiths

"QUALITY THAT LASTS FOR GENERATIONS... ENGLISH-MADE DURSTON D2/EX ROLLING MILLS, FROM FREI & BOREL!" J.R. Frei, Jr.

Compared to units costing considerably more, the Durston D2/EX has 2 sets of 120mm wide specially-hardened steel rollers, 7:1 reduction for flat rolls and 3.5:1 reduction for wire, 9mm to 1mm, and side roller extension for making 3 sizes of half-round wire...plus, a convenient, sturdy steel cabinet stand. Quality that will last for generations, from Frei & Borel.

Or choose from our catalog of quality jeweler's tools, the versatile West German Combination Ingot Mold. It will make round wire and half-round wire in 3.0, 4.0, 5.0 and 6.0mm, as well as sheet to a maximum of 80 × 50 × 4mm specify Part No. 019-480... all with West German precision.

Part No. 019-480



For details on these and other outstanding Frei & Borel quality jeweler's tools and equipment, call or write today for FREE Rolling Mill brochure and Hard-to-Find European Tool Catalog.

IN SOUTHERN CALIFORNIA

BOREL & FREI

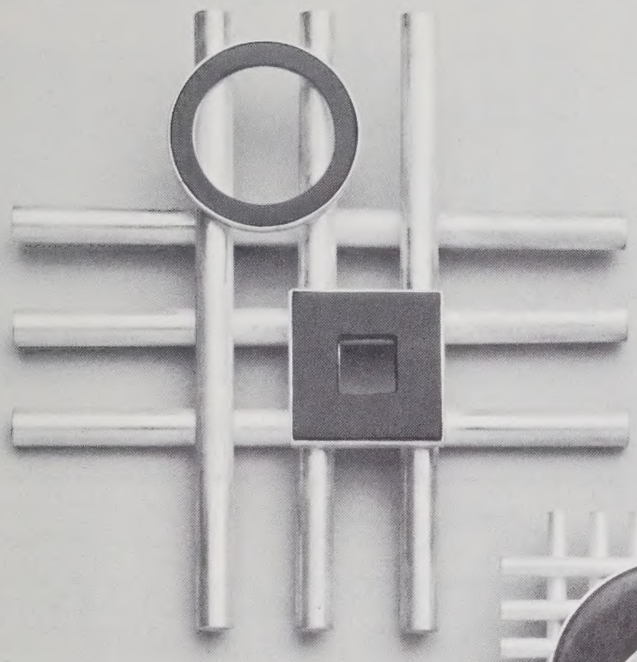
315 W. 5th ST. LOS ANGELES, CA 90013 (213) 689-4630

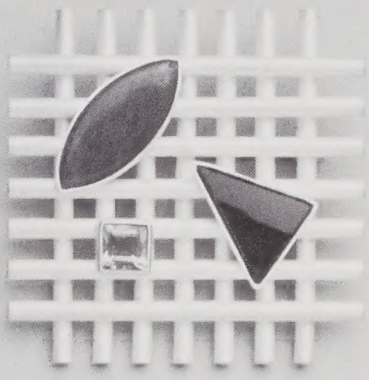
OTTO JULES FREI&BOREL

(415) 832-0355. 119 3RD ST., OAKLAND, CA 94607
QUALITY JEWELRY SUPPLIES FOR GENERATIONS

LOUIS MUELLER
JEWELRY

DECEMBER, 1985





BROOCH, 1985: vermeil, onyx
2½" x 2½"

BROOCH, 1985: vermeil, lapis, peridot, onyx
2" x 2"

HELEN DRUTT

HELEN DRUTT GALLERY
1721 WALNUT STREET
PHILADELPHIA, PA 19103
(215) 735-1625

NEW HOURS:
WEDNESDAY — SATURDAY, 11 A.M.-5 P.M.

SEPTEMBER:
MIRIAM SHARLIN
POSTPONED

/

OCTOBER:
GEORG DOBLER
POSTPONED

QUADRUM GALLERY

"WORKED WITH GOLD II"

October 18 thru 31, 1985

ABRASHA
FAITH ALLOTEY-JORDAN
GLENDA ARENTZEN
JAMIE BENNETT
CATHY BUNT
JOE CORNETT
DIANA VINCENT CO.
ROBERT EBENDORF
LUNA FELIX
ARLINE FISCH
PAT FLYNN
STUART GOLDER
SUSAN HAMLET
DEBRA HEALY
DANIEL JOCZ
RANDY LONG
LINDA McNEIL
ELEANOR MOTY
ROBIN QUIGLEY
RICHARD REINHARDT
SUSAN REINSTEIN
IVY ROSS
MICHEL ANN ROYSTON
GAYLE SAUNDERS
JILL SLOSBURG
JEAN STARK
RACHELLE THIEWES

The Mall at Chestnut Hill, Chestnut Hill, MA 02167 (617) 965-5555

ARTWEAR

409 WEST BROADWAY NYC 10012
212/431-9405

JEWELRY CLASSES

Comprehensive & Specialized Courses

- Hard Soldering
- Electro-Plating
- Enameling/cloisonne
- Wax modelling
- Casting/Mold Making
- Stone Setting
- Jewelry Repair
- Polishing/Buffing

Beginners and Advanced Students
Flexible class hours / Bench time available
Day–Evening–Saturday classes

FREE INTRODUCTORY LESSON
Individual and Small Group Instruction
32 East 31 St. New York, N.Y. 10016 (212) 686-1944

STUDIO JEWELERS, LTD.

REVERE ACADEMY OF JEWELRY ARTS

760 Market St. • Suite 939M • San Francisco, CA 94102 • 415/391-4179

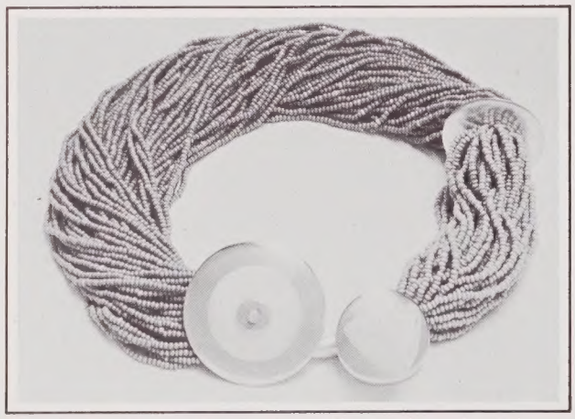
Anticlastic Raising
Casting
Design & Creativity
Diamond Grading
Engraving
Gem Identification
Gold Granulation
Goldsmithing
Jewelry Repair
Metalsmithing
Mokume Gane
Production Tricks
Refining Metals
Rendering
Rubber Mold Making
Selling Jewelry
Basic Setting
Intermediate Setting
Pave Setting
Advanced Setting
Comprehensive Setting
Wax Techniques

CONCEPTS

presents

SHARON CHURCH

SEPTEMBER 6-30, 1985



Beaded collar with sterling silver, glass beads and marble

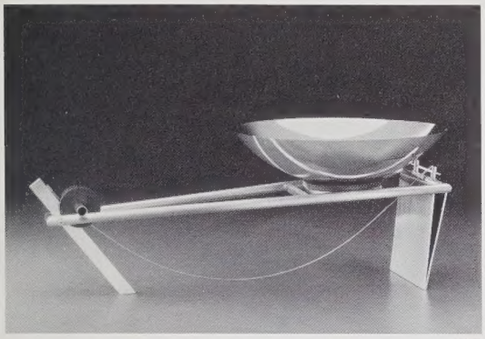
sixth and mission streets • po box 301 carmel, ca 93921
408/624-0661

Metalsmith Advertisers

59–American Craft Council
62–Appalachian Center
60–Artistic Imports
2–Artwear
61–Billanti Casting
61–Boston Findings
58–C.R. Hill
59–C.W. Somers
2–Concepts
6–Franklin Mint
IFC–Frei & Borel
1–Helen Drutt Gallery
62–Kenneth Rose Gems
63–Metal Crafters Supply
61–Met-L-Art
62–Penland School
1–Quadrum Gallery
63–Reactive Metals Studio
2–Revere Academy
IBC–Rio Grande
7–Robert Peter Devoe Ltd.
62–Southwest Craft Center
2–Studio Jewelers
59–Thomas Michaels
58–Toga
63–West Earth
61–Worcester Crafters Center

Metalsmith

Fall 85 Volume Five Number Four



30

Features

Ornamental Polarities: Gary Griffin's Jewelry and Constructions 8
by C. E. Licka

The VO Galerie 16
by Roger Kuhn

Master Metalsmith: Allan Adler 20
by Rebecca Adler, introduction by Alvin Pine

Beyond the Bench 26
by Akiko Busch

Susan Hamlet: Culture of Materials 30
by Karl Bungerz

Vincent Ferrini 36
by Curtis LaFollette

Doublée Making 38
by Charles Lewton-Brain

Reviews

Masterworks of Contemporary American Jewelry 41
by Deborah Norton

Contemporary Metals USA 42
by Carolyn Novin

Jamie Bennett 43
by Brigid O'Hanrahan

Jamie Bennett Selects 44
by Gretchen Klunder-Raber

Contemporary Blacksmithing 44
by J. Fred Woell

Helen Shirk 46
by Gary Griffin

Plastic Crafts 46
by Akiko Busch

Dalya Luttwak: Portfolio Exhibit 48
by Komelia Hongja Okim

Ignatius Widiapradja 48
by Jalaine Madura

Munya Avigail Upin 49
by Alice M. Shukalo

Elisabeth Kodré-Defner 50
by Britta Schömer

An International Gathering: The Society of North American Goldsmith's 1985 Conference 50
by Pamela Ritchie

Departments

Letters 6

Index to Issues 4/1–4/4, 1984 52
compiled by Joanne Polster

Books 56

Technical Briefs 56
by Tim McCreight

8

Metalsmith
Editor/Sarah Bodine
Associate Editor/Mark Baldridge
Design Director/Martin Moskof
Designer/Debbie Jayne
Design Assistant/George Brady
Copy Editor/Akiko Busch
Proofreader/Mary Calabrese
Circulation/Bob Mitchell
Contributing Editors:
Jamie Bennett, Bruce Metcalf, Tim McCreight, Bernard Bernstein, Robert Cardinale, Elizabeth Skidmore Sasser, C.E. Licka, Deborah Norton
Advertising/Richard Mulligan, Oona Mulligan
Production Coordinator/Michael Croft

Editorial Advisory Board
Sharon Church, Chairman
Glenda Arentzen, Karl Bungerz, Gary Griffin

Society of North American Goldsmiths
President/Michael Croft (1987)
Past President/Arline Fisch (1986)
Secretary-Treasurer/Lane Coulter (1987)

Board Members
Mark Baldridge (1987)
Sharon Church (1988)
Marcia Lewis (1986)
Linda Threadgill (1986)
Lois Betteridge (1988)
Sam Beizer (1989)

Published quarterly by the Society of North American Goldsmiths (SNAG), a nonprofit organization, 6707 North Santa Monica Blvd., Milwaukee, WI 53217. Annual membership rates, which include a subscription to *Metalsmith:* $75 for Distinguished Members, $45 for Members and Institutions, $30 for Students.

Annual Subscription to *Metalsmith* (4 issues): $20 United States and Canada; $30 all other countries (surface mail).

Address membership and subscription inquiries to: Bob Mitchell, SNAG, 6707 North Santa Monica Blvd., Milwaukee, WI 53217. Telephone (414) 351-2232. Claims for missing issues only accepted if received within four months (USA, Canada, Mexico), elsewhere six months.

Address advertising inquiries to: Richard Mulligan, 74 Main Street, Newtown, CT 06470. Telephone (203) 426-3277.

Contents copyright © SNAG and may not be reproduced in any manner or form without written permission.

ISSN 0270-1146

Second class postage permit at New Haven, CT and additional mailing offices.

Address editorial material to Sarah Bodine, Editor, 1 Penn Lyle Road, Princeton Junction, NJ 08550. Unsolicited manuscripts and photos will be handled with care, but the magazine assumes no responsibility for them. All material must be accompanied by a self-addressed, stamped envelope. The opinions expressed in *Metalsmith* are those of the authors and do not necessarily represent those of the trustees of SNAG or the staff of *Metalsmith*. *Metalsmith* is partially supported by a grant from the National Endowment for the Arts.
Typeset and Printed by Allied Printing Services, Manchester, CT

Cover: Gary Griffin, ~~*Restored, Renovated*~~, *Repaired,* painted steel, wood, hide, 1984. **Above:** Charles Eames, *Low Side Chair,* molded walnut plywood, steel rods, rubber shockmounts, 27⅜" h., 1946. Collection, The Museum of Modern Art, New York. Gift of the manufacturer: Herman Miller, Inc. Story begins on page 8

Postmaster: Send address changes to **Metalsmith,** 6707 North Santa Monica Blvd., Milwaukee, WI 53217

Announcing

THE NATIONAL HISTORICAL SOCIETY

CIVIL WAR CHESS SET

Richly detailed portrait sculptures of great American heroes
—in solid pewter, solid brass and fine enamels.
An heirloom chess set to be enjoyed for generations.
Created by the world-famous craftsmen of The Franklin Mint.

THE NATIONAL HISTORICAL SOCIETY is dedicated to bringing the excitement and power of American history—as well as its significance—to people in every part of the land.

It is in keeping with this purpose that the Society is about to issue its own Civil War Chess Set. A dramatic tribute to the heroes of both North and South—and a work all the more intriguing because the playing pieces include richly detailed three-dimensional *portrait sculptures* of the great Generals of Union and Confederacy, captured for the ages in solid pewter, solid brass and fine enamels.

This extraordinary new chess set will be crafted to the highest standards of quality and historical authenticity. The National Historical Society has appointed The Franklin Mint to create the sculptures, each of which will be a new and original design. Some figures will be shown standing, some seated, some kneeling, some mounted on horseback. And each figure will be painstakingly crafted of solid pewter, hand-finished, then set atop a solid brass pedestal base embellished with a circular band of richly colored enamel—*blue* for the soldiers of the North, *gray* for those of the South.

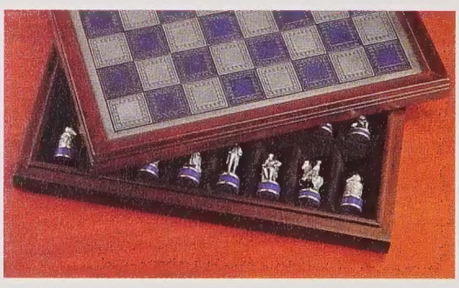
Every sculpture, moreover, will be so rich with authentic detail that only the artists and master craftsmen of The Franklin Mint, steeped as they are in the tradition of *precision coinage,* could have achieved it. Indeed, every nuance of facial expression, uniform and weaponry—right down to the buttons, braiding, sabers and carbines—will be depicted with meticulous accuracy.

Thus, The National Historical Society Civil War Chess Set is also a magnificent *collection.* A triumphant achievement of portrait sculpture—and the ultimate in micro-detailed miniaturization.

ALL FIGURES SHOWN ACTUAL SIZE.

Major General
William Tecumseh Sherman
BISHOP

General in Chief
Ulysses S. Grant
KING



General in Chief
Robert E. Lee
KING

Major General
J.E.B. Stuart
KNIGHT

Available only by direct subscription. Issue Price: $17.50 per sculptured chess piece.
Limit: One complete set per subscriber. Please enter your subscription by October 31, 1985.

This handsome pewter-finished chessboard and fitted presentation case will be provided as part of the set.

A dramatic showpiece for your home or office

The chessmen themselves are scaled so that each one will suit the function assigned to it in the game of chess. And the handsomely crafted, pewter-finished playing board has been sized with equal care. Specially fitted, to also serve as the cover for the case which will house all 32 playing pieces, the board completes a presentation so attractive that the chess set will be played and displayed with pride and satisfaction. A Certificate of Authenticity, and specially written reference materials, will also be provided.

Exhibited on a table or cabinet in your living room, family room, den or office, this is a possession certain to evoke both admiration and respect from all who see it. A unique tribute to unique Americans. A work of heirloom quality, that will bring you endless pleasure through the years. And a chess set eminently worthy of being passed on from generation to generation.

The subscription rolls are now open. The work may be obtained *only* by direct subscription, with a limit of one complete set per subscriber.

The chessmen will be issued to you at the attractive price of $17.50 each, with the specially designed playing board and protective case provided at no additional charge. As a subscriber, you will receive two sculptured pieces every *other* month. You will, however, be billed for only *one* chessman at a time—a total of just $17.50 per month. In addition, you will have the option to complete your set earlier, if you wish—but you will be under no obligation to do so.

Here, then, is a work that will bring lasting pleasure to chess enthusiasts, history buffs, collectors of military miniatures—to anyone who appreciates our nation's heritage. Indeed, it is an unmistakably American chess set, that will make a dramatic addition to any room. And an exciting showpiece that will be displayed, enjoyed and treasured by each succeeding generation.

To acquire The National Historical Society Civil War Chess Set, no advance payment is required. But please note that the accompanying Subscription Application is dated and should be returned postmarked by October 31, 1985.

© 1985 FM

SUBSCRIPTION APPLICATION

The National Historical Society

CIVIL WAR CHESS SET

Please mail by October 31, 1985.

The National Historical Society
c/o The Franklin Mint
Franklin Center, Pennsylvania 19091

Please enter my subscription for The National Historical Society Civil War Chess Set, consisting of 32 chessmen.

I need send no money now. I will receive two new playing pieces every *other* month, but will be billed for just one piece at a time—$17.50* per month—beginning when my first shipment is ready to be sent. I will receive the fitted presentation case and pewter-finished chess board at no additional charge.

**Plus my state sales tax and $.50 per chessman for shipping and handling.*

Signature_____
ALL APPLICATIONS ARE SUBJECT TO ACCEPTANCE

Mr./Mrs./Miss_____
PLEASE PRINT CLEARLY

Address_____

City_____

State, Zip_____

Limit: One complete set per subscriber.

LETTERS

Many letters received are of interest to the entire readership. Unless stated otherwise, all letters received may be included in the "Letters" section. Address letters to: Sarah Bodine, Editor, Metalsmith, *1 Penn Lyle Road, Princeton Jct., NJ 08550. Letters should be signed and a return address given. The editors reserve the right to edit for publication.*

Dear Editor:
The Summer 85 *Metalsmith* just arrived and it is filled with articles I look forward to reading—in fact, for me, it is one of the best issues yet.

The review of "Metalwork '85" on page 45, however, has a caption problem (the photos must have been rearranged during the layout stage). The photos are actually as follows: Top right—Yvonne Arritt; Middle right—Janet (not Jane) Peters; Bottom right—Tina Chisena; Top left—Christine Thrower; Bottom left—Lisa Vershbow; (Wilma Lehman's piece is not shown).
—Roger Kuhn, President
Washington Guild of Goldsmiths

Dear Editor:
The last time England attempted to recolonize us, they lost the War of 1812, and most of their pride, at New Orleans. The implications of this small disaster for Brother Jonathan* seems to have been lost on Peter Gainsbury (see *Metalsmith* Spring 85, page 54). His incessant campaign to install the English aristocracy's investment esthetics in North America is about as welcome as their class structure from which it springs. The point we should all remember is that American metalworkers developed their esthetics in a democratic university system, which liberated them from the demeaning constraints of the English silversmithing tradition. The results are clear visual statements for anyone to interpret, a plethora of approaches, incessant eclecticism, unmitigated experimentation and a wanton celebration of technical excess. I will happily assert that this is the cauldron out of which the avant garde of the visual arts will be born.

*Brother Jonathan was a derisive term for Englishmen in the 1830s. Considering the antiquity of Peter's arguments, it seems to be an appropriate time period from which to draw imagery.
—Curtis K. La Follette
Professor of Art, Rhode Island College

Dear Editor:
I wonder how many letters you'll get to forward to Susan Kingsley re her statement as to the model and the mold. If anyone uses wax it will melt upon receiving Devcon, as that substance during curing generates a heat of up to 160°. I have had a hydraulic press built myself and have used it. The most important part is making the models and molds. Fundamentally her article does not differ from the 1977 one ("Practical, Inexpensive Hydraulic Pressing and Die-Forming for the Artist-Metalsmith" by Marc David Paisin, 1977, reprinted in *Metalsmith Papers,* SNAG, 1981, pp. 30–34.), but may I suggest that information should be gathered from various jewelers who do use the press and its variants (elbow grease) to get further preparatory working ideas to pass on. The fundamentals of the press remain constant, but to achieve a given goal, there are many ways to Rome. And that would make a very important contribution to the magazine.
—Marga Kassimir

Susan Kingsley replies:
Marga Kassimir is correct in stating that Devcon Liquid Steel B generates heat while it cures. Temperatures up to 200° are possible. However, wax (and plasticene) can be used for models without melting. Apparently this is because the quantities of epoxy required for small dies do not generate the maximum amount of heat, and the steel retaining rings tend to dissipate it. I have used several types of carving wax, injection wax and plasticene for models up to 3 inches in diameter without encountering any problems associated with the heat generated by the curing of Devcon B.

EDITORIAL

There was Otto Künzli staring at a Toronto sidewalk vendor's wealth of buttons—rock-and-roll stars; cockatoos, dalmatians; cartoon characters. What was going through his mind? Was he wondering at the routine production of tourist ephemera? Was he thinking about buying some to use in his own work? Was he questioning where popular culture and art meet? After all, in his lecture that morning he had billed plexiglass pins holding interchangeable postcards as art. Why hadn't this vendor been invited to show slides of his pins? Weren't they also jewelry?

Such unprecedented probing of the fundamental issues in the field of metalsmithing and jewelry was everywhere in evidence at the 1985 SNAG conference in Toronto, from lecture hall to gallery opening to street conversation. I say unprecedented because previous conferences have tended toward formal presentations on technique, business and history, and such other issues of esthetics and criticism were privately discussed. Here the issue of where jewelry criticism is going was debated at James Evans's panel; the value of narrative and personal imagery as an entry point for metalwork was discussed at Jamie Bennett's panel; and Künzli in his own lecture probed the consequence of jewelry as communication, as illusion, as power, as exploitation. It was clear from the inclusive nature of this conference that a healthy pluralism in studio metalsmithing is generating lively exchange and evaluation.

Pam Ritchie's notes on the conference appear in this issue; and in the future *Metalsmith* will publish presentations and continue dialogue begun at this animated gathering. As an advocate of the metalsmithing community, this magazine will act as a catalyst to keep the exchange on these issues growing and developing.

—SB

FIRST ANNUAL

THE ENGAGEMENT AND WEDDING RING

NATIONAL COMPETITION

Cash Awards

Designs submitted may be in four categories, wedding rings without stones, wedding rings with stones, engagement rings, engagement/wedding ring sets.

Open competition for students and professionals. Deadline for submitted works: **November 1, 1985**

For complete information and entry form write,

THE WEDDING RING STORE®

790 North Jefferson Street Milwaukee, Wisconsin 53202

ORNAMENTAL POLARITIES
GARY GRIFFITH'S JEWELRY AND CONSTRUCTIONS

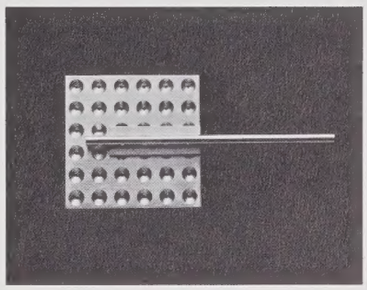
by C.E. Licka

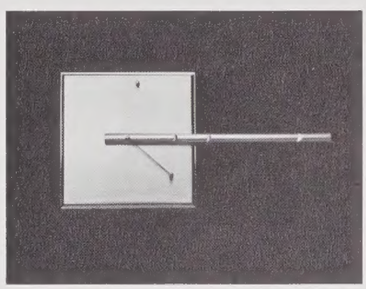
I hesitate to call this work sculpture;
hence,
constructions.
I regard construction
to be an intellectually based process
directing the placement of elements.
Construction,
foreign to organic method,
contesting flow,
cause and effect.
Construct,
allowing for the simultaneous
existence of extremes;
an orchid adjacent to a chain link
fence.
The historic decorative arts,
especially those of purely ornamental intention,
these are important resources.
They are omnipotent
as vestiges of the human endeavor.
They are reassuring guardians,
buttressing,
giving authoritative credibility to
contemporary endeavors.
I am seduced
by their subtle use of the useless.
Gary Griffin, "On Recent Work," 1981[1]

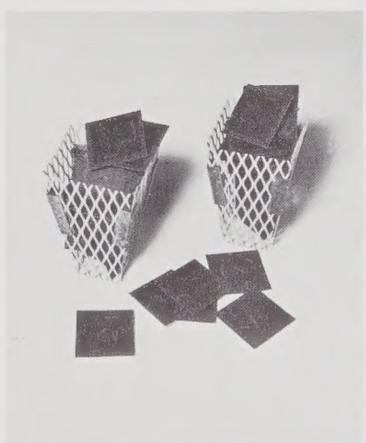
When Gary Griffin wrote this poetic meditation on the status of his work for an exhibition at the Helen Drutt Gallery in Philadelphia in 1981, he was at a turning point in his development. His hesitancy to designate his work as sculpture appears to be an evasion, an attempt to swerve away from media categories, to find an identity for himself and his art. As a form of anxiety, this period of questioning and reassessing his past work has affinities with what Harold Bloom has called the "anxiety of influence." This simply means Griffin was attempting to clear away some "imaginative space" for himself to continue his ornamental pursuits.[2] While his direction is revisionary in nature—a corrective measure to redirect his previous concerns for machine-tool technology and anonymous elemental geometric forms—a shift in his esthetic consciousness is actually taking place. Griffin's growth as an artist could be compared to a watershed, especially the constructions dating from 1981, which represent the high ridge between two different streams of stylistic and conceptual development flowing in different directions. On one side of this ridge, there is an obsession with a machine esthetic applied to ornamental work, rationally and intellectually based. On the other side is an intuitive and emotionally conditioned set of responses directed towards ornament and function and anchored in the decorative arts. Stressing the stylistic fissures in his work over the past 10 years, however, would be a superficial reading of Griffin's evolution. Style may be part of the issue, but not the crucial one. In understanding the genesis of his work, it seems more important to address the conceptual nature of his art that has allowed Griffin to question and tax the limits of traditional metalsmithing attitudes towards ornamentation.

Machine-Tool Technology and Momentary Pins

In comprehending Griffin's work during his "machine phase," it is important to keep in mind the confluence of Modern artistic movements, such as Cubism, Futurism, Constructivism, Suprematism, De Stijl, Purism and the Bauhaus, as well as industrial design attitudes, which set the stage for his own investigations. Divergent as their goals might appear, these movements helped to shape and legitimize an artistic conception of the world for him. These ideas, briefly stated, consisted of a rejection of subjectivity in favor of an objective and scientific understanding of art; art as a means of transforming society, as opposed to art for art's sake; machine imagery and processes as an appropriate field of esthetic inquiry; the juxtaposition of different materials and objects as a means of construction; the denial of flux through abstract geometric forms.







Opposite page: Gary Griffin, Photo: Gary L. Heard; **top**: *Brooch 78-2,* machined aluminum, copper, 3 x 6″; **center**: *Brooch 77-3,* aluminum, nylon; **above**: *Momentary Ornaments* pins, abrasive paper, vessels: steel, painted, 2 x 2″, 1979–85

The rise of Constructivism of the 1960s had a particularly strong influence on Griffin's work. The primary structures of Tony Smith, Donald Judd, Robert Morris and the later systemic pieces by Sol Lewitt are characteristic of a variety of similar experiments using geometric configurations, pure, unaltered industrial colors and elemental forms. Artists contracted out the fabrication of these industrially impersonal works in an attempt to depersonalize and minimize the input of their ego. As an act of demystification, sculpture and reductivist painting from this decade tended to deny the personal and expressive nature of early abstract art. By emphasizing anonymity, the standardization of forms and modern machine production techniques, the 60s artists wanted sculpture and painting to be viewed objectively.

Griffin's graduate years at Tyler School of Art's Metals Department (1972–1974) were also important in determining his use of industrial materials and belief in the efficacy of a machine esthetic. Stanley Lechtzin, his teacher, was and still is, one of the major proponents in metalsmithing for the use of industrial processes and synthetic materials to achieve artistic ends. Griffin couldn't avoid being influenced by Lechtzin's polemical position. But instead of pursuing an organic esthetic based on Lechtzin's electroforming, he moved into the realm of machine-tool technology and adapted it to his own needs.

After graduating from Tyler, he took a teaching position at Rochester Institute of Technology. The next four years were for him a period of consolidation and expansion of Modernist, minimal and industrial design attitudes. Characteristic of this period are his large collars of 1976 and his brooches of 1977 and 1978, typified by *Brooch*

77-3 made of aluminum and nylon. For example, *Brooch 77-3* (1977) reflects a synthesis of his interests up to this time. From a materials context he incorporated content in this brooch by virtue of the synthetic and metallic materials associated with industrially fabricated objects. From a formal context, the planar surface of this geometric brooch negates the feeling of handmade, where an object reveals through its imperfections the trace of the artist's presence. Instead, its anonymous, "machined" appearance presents a highly rationalized and idealized form, seemingly inflexible to change. This brooch, resonant with oblique social implications, could theoretically be mass produced according to the artist's design specifications. But, like others from this period, it reflects a disparity between theory and practice. Instead of being impersonal and "styleless," with the intention of having some sort of social impact through a well-designed piece of jewelry, this brooch is one-of-a-kind, and thereby reinforces the notion of individuality and uniqueness. It is only later, when Griffin explores the ramifications of his momentary pins and begins to shift his conception of ornamentation in metals, that his machine-tool esthetic and personal brand of collective idealism fully express themselves.

Griffin's ideas about machine-tool technology were summed up in his seminar paper "Machine Tool Technology: An Aesthetic Application," given at the 1978 SNAG Conference.[3] This important document clarifying his conceptual development prior to 1979 illustrates his allegiance at the time to a 20th-century Modernist mechanical world view, based on positivism, rationalism and an ordered perception of the world. He focused on the need to generate an esthetic syntax using machine-tool technology. In the paper, after a historical synopsis of the development of industrial machine-tool processes, he discussed an often overlooked fact: there is a tradition in machine-tool processes just as there is in other traditional metalsmithing procedures.[4] The rest of the paper indicates how the "lathed aesthetic" is dependent on the shape of the cylinder and linear subtractive relationships.[5] Esthetic options are multiplied in this case due to the flexibility of tool-bit shapes. As a result of this infinitude of possibilities, the metalsmith can take simple pattern reliefs and develop them into complex patterns by overlapping repetitive motifs.

What Griffin illustrates in this paper is basically a "systems approach," a positivism methodology of cause and effect. By the end of 1978 he had created an "ideal" system for artistic production, capable of being codified and expanded upon by means of mechanistic permutations arrived at through machine technology. His system was ordered, precise and made little room, if any, for imprecision and randomness.

But something began to change. By 1979, one senses a shift in his thinking, representing a logical extension of his past work as well as the intrusion of a more intuitive approach. This shift in his attitude towards ornamentation was articulated during the Spring of 1979 in a lecture given at the Memphis Academy of Art dealing with "Directions in Contemporary Metalsmithing." Here he began to discuss his recent ideas about "throwaway or momentary pins." For Griffin, it made perfect sense to produce a well-designed, yet disposable piece of ornamentation that would reach the public-at-large. In the age of obsolescence and Dixie Cup discards, what better form of ornamentation than something that could be jettisoned after use?

One might even contend that a new perception of the world was in the making for Griffin at this time. Instead of a mechanistic view of the world characterized by the notion of progress as a movement away from the natural world's lack of order, his jewelry and constructions seem to make references to an entropic paradigm.[6]

The law of entropy is based on the Second Law of Thermodynamics, which states that "matter and energy can only be changed in one direction, that is, from usable to unusable, or from available to unavailable, or from ordered to disordered."[7] Since we cannot create energy, all we can do is "transform energy from one state to another."[8] For example, if we burn a log, it is apparent after the fire we have a heap of ashes. The energy remains, but it is transformed into other material. We can't reburn or reuse the wood and get the same results because of the process of displacement. In effect, the law of entropy attacks the idea of progress and the notion that science and technology are capable of creating a more ordered world out of the natural world.

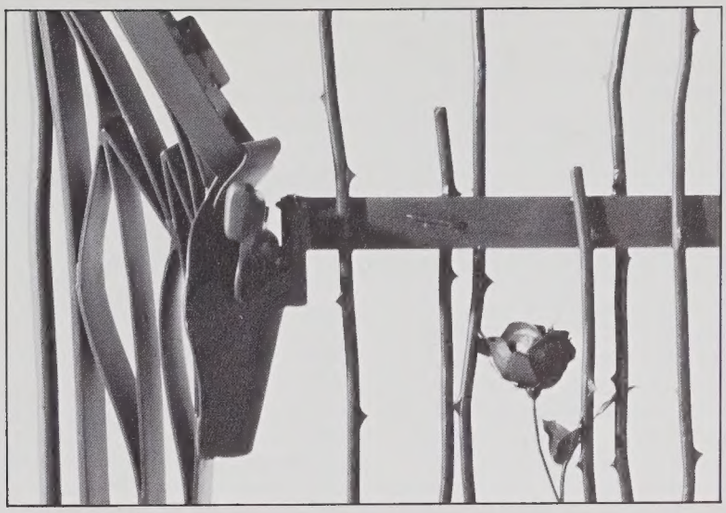
This notion of displacement gave Griffin an analogue in his own work. When you lathe you are continually displacing material, making usable material into unusable material, so to speak. He asked himself, why not incorporate the random filings and residuals from the material being processed into his pieces? By using displaced material and reinserting it into his constructions or jewelry, Griffin was beginning to challenge his earlier assumptions of machine-tool technology and the immutability of matter.

In July of 1979, Griffin attended the Platinum Workshop in San Diego. He immediately began to pick up and use the residuals left over from his own and other works being processed at the workshop and use them in his momentary pins. For example, he would start with a square piece of sandpaper to function as a pin and use platinum wire as a tool to scratch on its surface. Or he would attach to the pin a filing or piece of wire that had been displaced from the material being processed. Platinum was no longer of interest to Griffin in the traditional sense of its preciousness or as the material to be worked on. There is also an element of irony in these pins in relation to normal metalsmithing practices. One even senses a metaphorical conceit operating in the sandpaper momentary pins by the exaggeration and extension of their metallic references. For example, the only connection sandpaper has to metal as a material is the metallic oxide on its surface, or as a processing material in one of the phases of making a finished object. In effect, Griffin elevated an abrasive material, which is usually disposed of after being used to process other materials, to a legitimate material in its own right. Preciousness, uniqueness and permanence were theoretically upended, giving the pins a potentially ephemeral and nonprecious character. Furthermore, the random stacking of the pins and their display in a meshlike industrial basket, as if thrown away, reinforced their transitory nature. In discussing the concepts underlying these pins in the context of ornamentation, Griffin compares them to the "tradition of wearing a flower on a lapel."[9] Once a pin serves its function for a specific occasion, or begins to wear out, one can just throw it away, since it can be cheaply replaced.

Above: *Construction 79-7*, copper, brass, bronze, aluminum, steel, 24 x 6 x 6″; **opposite page**: *Cap Gun, Roses and Middle America* gate, painted steel, 74 x 77 x 12″, 1984; **inset**: detail

By referring to obsolescence and expendability, Griffin attempted to create a form of ornamentation representative of his age, akin to Baudelaire's idea of *modernité*. For both Griffin and Baudelaire, an imaginative artist who lives in the present "makes it his business to extract from fashion whatever element it may contain of poetry within history, to distill the eternal from the transitory"[10] by emphasizing the "ephemeral, the fugitive, the contingent, the half of art whose other half is the eternal and immutable."[11]

In looking at the earlier brooches (e.g., *77-1, 77-3, 78-2*), one is reminded of Platonic solids, unchanging models of perfection, perpetually frozen and incapable of entering the stream of life at a public level. The momentary pins, however, at least in theory, appear to be more consistent with an ever-changing world, subject to entropy, chance and use. But once again, the question arises, isn't there a gap between theory and practice? Even though the momentary pins have the "potential" to provide a well-designed, cheaply made, mass-produced piece of jewelry, they would be doomed to failure without an essentially pragmatic approach (e.g., marketing, advertising) to suppport the idealistic and collective premise of "pins for all!" How does one combat a John Doe mentality that would rather dial an 800 number, toll-free, and purchase this month's "Diamonel" offer with its vegematic flexibility, to make you a fashion hit overnight by not only giving you one phony diamond ring, but also a whole bevy of other fashionable pieces of jewelry to go with it for $19.95? The illusion of preciousness and elitism associated with this brand of marketing and the Keepsake Diamond mentality are all part of a corporate packaging system meant to produce profit, and good design doesn't necessarily matter. While it all seems to boil down to taste and corporate profits, we must admit that we are also a passive culture,



often willing to accept the myths of our own mega-visual tradition and commodity fetishism as being authoritative.

The concepts and design principles behind Griffin's momentary pins are sound, but, as previously mentioned, their feasibility is another matter. But is the production and completion of the momentary pins project really at issue? It seems their importance might well lie in their not being produced. Once they were produced they would become a commodity like any other, to a lesser or greater extent. Lost in the shuffle of objects they would lose their polemical character. For these pins are a socially mediated and autonomous source of information in their own right. They reflect ongoing social processes by reorganizing certain aspects of social life into a statement that provides an independent and polemical viewpoint criticizing the social relations from which they arose.

The Demise Of The Machine Esthetic

By the fall of 1979, Griffin had internalized his previous knowledge of machine-tool processes and achieved what he considered to be a breakthrough in *Construction 79-7* (1979). This small, tripod structure, with its milled, flat, rectangular surface displaying some of the residual cutouts from the milling process, carries forward the ideas he experimented with at the Platinum Workshop. The tabletop configuration penetrated by the vertical rods also adds a different dimension to his work with its strong, linear, upward movement and spatial presence. But something new was occurring in his working methods. Instead of adhering to a totally rational and systemic approach in constructing this piece, Griffin began to play with forms. For example, the sine curves were not "designed" nor mathematically conceived and then placed within a preconceived schema. Chance and random juxtapositions became increasingly important to him as he began to intuitively position his forms.

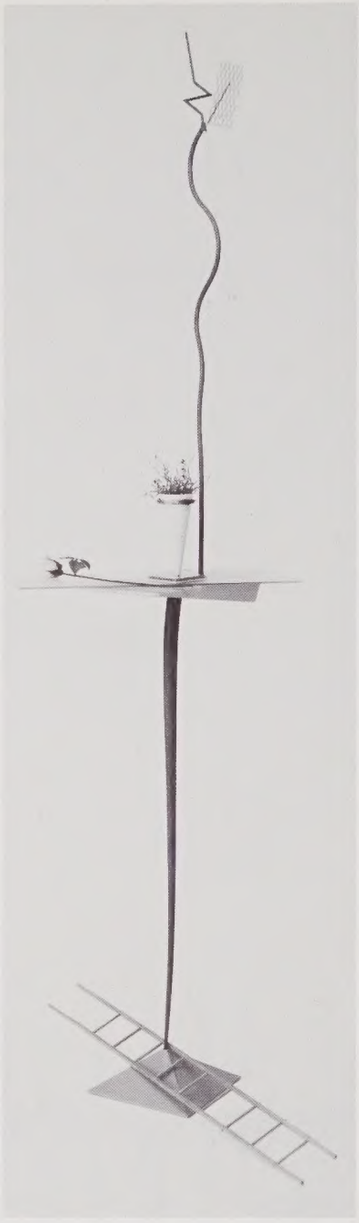
Another influence on Griffin's dissatisfaction with a machine esthetic was his exposure to Baroque decorative art in Vienna, Austria. In 1980 he was invited to participate with his momentary pins in the "International Jewelry Exhibition 1900–1980" held in Vienna. On his trip he visited the Kunst Museum, he was fascinated with the Baroque decorative objects. These works were excessively ornamental, dynamically designed and suffused with textural juxtapositions and illusions. Baroque decoration has an almost hedonistic feel, with its sensuality, pure love of "useless" ornamentation and trompe-l'oeil effects. It was in Vienna that Griffin began to rethink his position about the machine-tool esthetic he had evolved over the past five years and came under the spell of what he would later call the "subtle use of the useless." One object in particular, a reliquary type of construction with a marked vertical thrust consisting of stacked coral, metal and an ostrich egg, provided a fitting example from decorative arts history to support his belief in the "simultaneous existence of extremes." There were, of course, other 20th-century fine art movements, such as Surrealism, Cubism and Constructivism that emphasized principles of juxtaposition, but for Griffin it was important to find sustenance from both decorative arts history and the recent revisionism that was rejuvenating the decorative arts.

Further, in reflecting on his own work as well as the European formalistic directions in metalsmithing, he felt it all lacked an emotional appeal and was incapable of transcending intellectual forms of beauty. He began to see formalism as an arid exercise devoid of emotion and humanistic concerns and to feel a need to "humanize" his objects within the context both of the history of decorative arts and personal experience.

During 1981 Griffin increasingly explored the juxtaposition of elements in his large-scale constructions, such as *Construction 81-4,* in which representational imagery appeared for the first time. This was the piece that represented a watershed in his development when it was exhibited at the Helen Drutt Gallery. The formal and the decorative met head-on in an oxymoronic gesture, creating a "harmonious convulsion."

Construction 81-4 (1981, steel, plywood, glass and paint) is indicative of the germinal stage in his current direction involving an emotional symbolism associated with sentiment, memory, landscape and an increasing interest in the decorative arts. Formal and "material" references, including filings, disposable cardboard cups and the geometric mesh screen had affinities with his previous constructivist and entropically inclined formats. Connections to the history of furniture could be sensed in the attenuated cabriole leg tapering upwards from the tetrahedral base as well as the tabletop configuration. For the first time in his art personal symbols and representational imagery were incorporated in his constructions: the Pueblo Indian ladder, a crucifix shape and a plastic rose.

The catalyst for this shift in temperament and use of imagery was in part his summer trip to Taos and Santa Fe, New Mexico in 1981. It was on this journey that he rekindled childhood memories of the landscape. Seeing old friends and re-experiencing the Hispanic-Indian culture of his youth intensified his perceptions of a world that had been locked in the asylum of childhood.

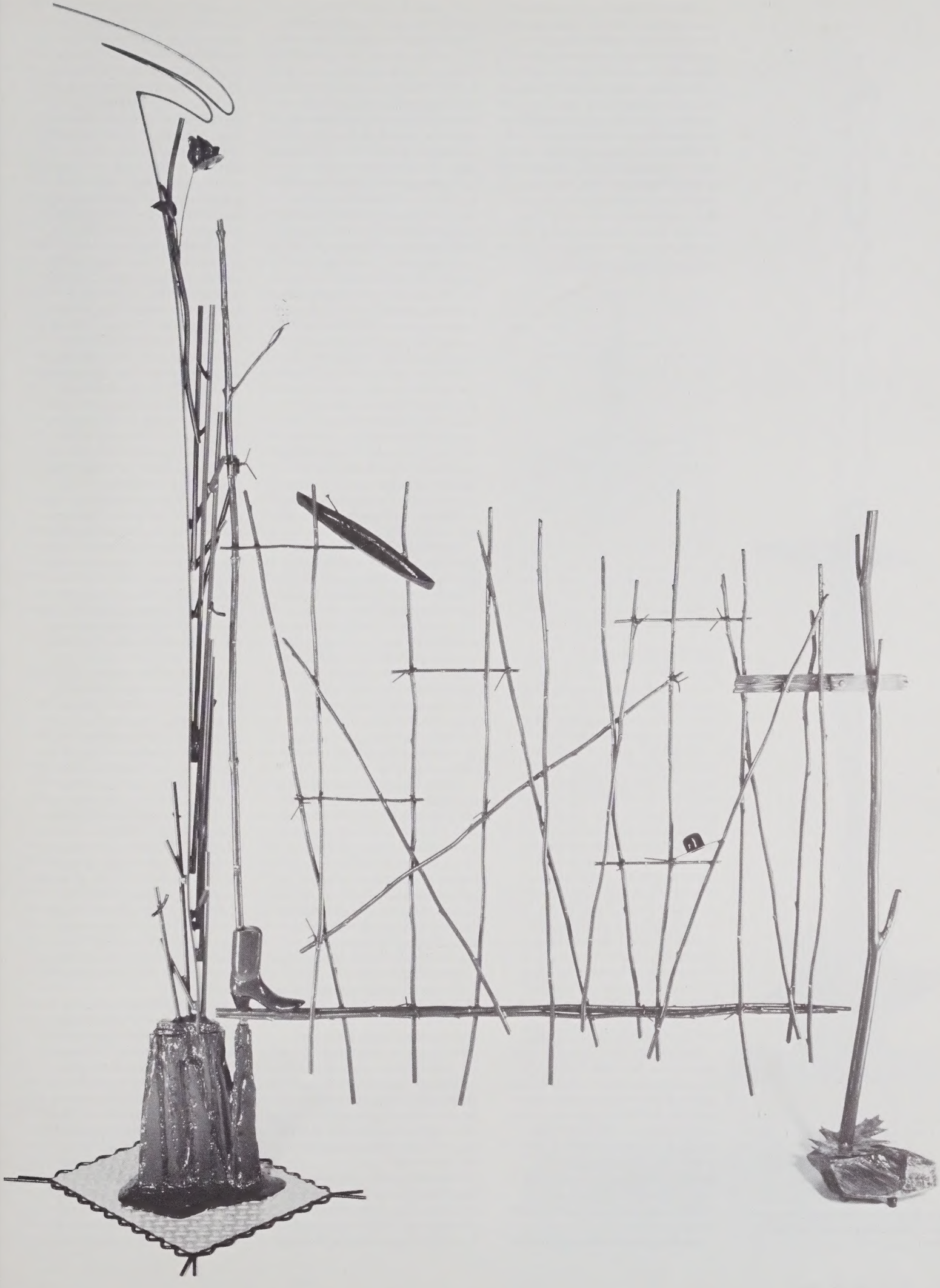


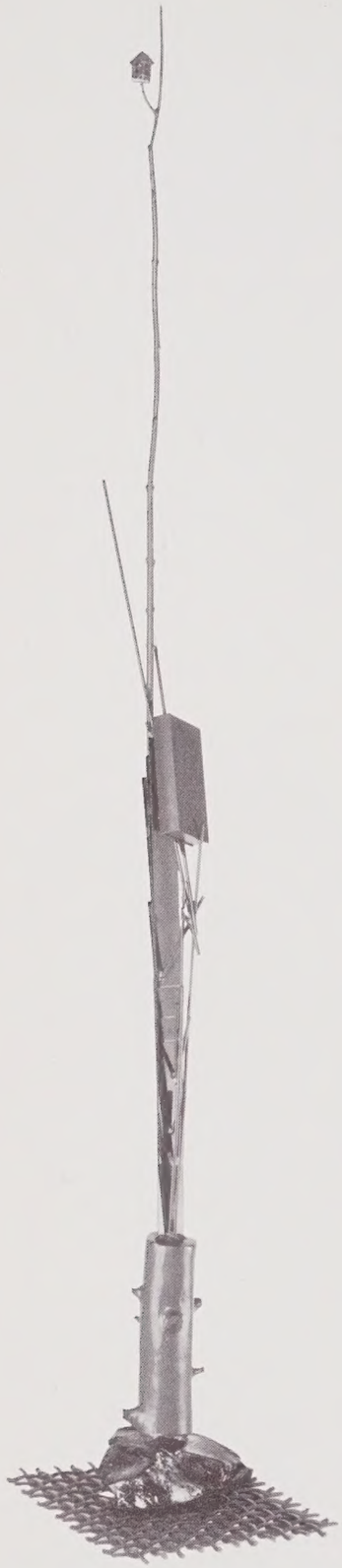
Above: *Construction 81-4,* steel, plywood, glass, paint, 96 x 24 x 24″; **opposite page**: *Blue Gate,* painted steel, 82 x 68 x 26″, 1984

His trip to Taos and Santa Fe helped him to address his sublimated feelings about his youth and experiences with the Hispanic-Indian community. Coincidentally, all around him were examples of the stacked systems of Mexican folk art that could be used at a formal level. He visited the Sanctuary de Chamayo where he saw retablos and the ex voto offerings of the *penitentes'* on the walls (e.g., a photograph of a Vietnam soldier with photos of his loved ones shoved beneath the glass panes adjacent to an icon of Jesus and plastic flowers). The plastic flower, by virtue of its representational nature and associations in an Anglo culture, has a different set of meanings (e.g., the rose in this case being a symbol of eros, beauty or natural—as opposed to synthetic—than that of the Hispanic-Indian community's use of the plastic flower as a religious offering. Not only is the juxtaposition of formal and representational symbols operating in this construction, but Griffin also supplies us with contrasting cultural signifiers, estranging us and asking us to put the pieces together.

Another influence on Griffin at this time were the writings of Mabel Dodge Luhan, who was associated at one time with the literary circle of D.H. Lawrence. In particular, *Winter in Taos* (1935) and the last volume of her autobiographical memoirs, *Edge of Taos* (1937) have some bearing on his emotional response to Taos and the Southwest. These books elaborate on how Taos transformed her life, the intersection of different ethnic groupings (Hispanic, Indian, Anglo), the mystical sensibility of the Indians and how their beliefs and creative expression are related.

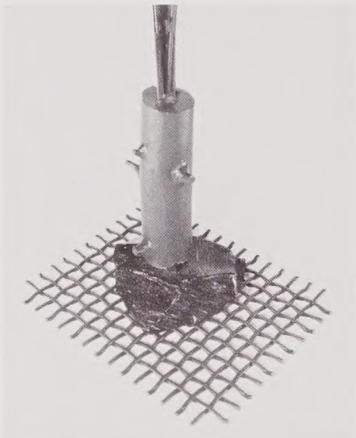
Both Luhan and Griffin found a living tradition in the Southwest that had deep roots in a communal tradition. This tradition was bound to an instinctive esthetic and rejected the rationalism of our last three centuries by creating symbolic references and communal experiences. Meaning and experience could be passed on, since everyone interacted with the social fabric in some way. The problem that arose for Griffin at this time, and one he is exploring now, is how to create an imaginative space or zone where the subconscious and conscious aspects of reality can be fused into a symbolic whole of some consequence for today's society.





Rugs, Rock, Books and Bird Houses, painted steel, 92 x 15 x 18″, 1984; **above right**: detail

Since 1981, his large-scale linear constructions, such as *I Wish I'd Known Herbert* (1983), *Rug 'N Stump Canoe in Rose* (1984), *The Valuable Lessons of Miller Street* (1984), *Rugs, Rocks, Books and Bird Houses* (1984), exhibit a growing interest in developing a personal set of references. For example, in *The Valuable Lessons of Miller Street,* one senses the storyteller at work. The piece deals with an elderly Italian lady who lived next door to Griffin's studio in Rochester. Her energy and dedication to her garden to grow tomatoes, figs and garlic impressed Griffin. The



title, as well as the imagery, gives one a clue to his intent that as "visual readers" we can gain a bit of wisdom, or even something useful, from this woman's singlemindedness and love of the soil.

What a storyteller does in the traditional sense is to inform the reader or give counsel. Just as stories were handed down from one generation to the next by an oral tradition, and were supposed to generate a set of universal experiences for the community, Griffin seems to be attempting the same by selecting images having common reference points. For example, if he wants to focus on a Southwestern quality he "may paint a canoe turquoise to reinforce that image."[12] Turquoise as a color has the flexibility of being both a common reference as well as a specific one relating to the turquoise jewelry produced by the Pueblo Indians.

Originally stories in an oral tradition were the major channel for recording experience where handicraft was the primary mode of production. As Walter Benjamin points out in his essay, "The Storyteller," the mark of craftsmanship is integral to the storytelling process, because "traces of the storyteller cling to the story the way handprints of the potter cling to the clay vessel."[13]

But Benjamin is talking about the communal conditions of the artistic process, and in our high-tech society these conditions are rare indeed. In modern life, storytelling has been superseded by the quantification of information. We know a great deal more at a superficial level, but it is less qualitative. Information has become the major form by which experience is collected to preserve experience. In effect, it has undermined experiences that would be more directly involved with the meaning of life. Our fragmentary lifestyles in this century, then, parallel the bits and pieces of information we get through the journalistic manipulation of experience. Storytelling was unprocessed and unmanipulated in its intent to convey the material fullness of life, so that each story had a lasting meaning for the community. Information, on the other hand, "does not survive the moment in which it was new. It lives on in that moment; it has to surrender to it completely and explain itself without losing any time."[14] Information, then, has nothing to teach us; it is another transient aspect of modern life that will momentarily survive only to lose its topical importance and be discarded.

Are we getting traditional stories in Griffin's new constructions, or are we receiving fragments of information? Can direct experience of a communal nature ever be expressed by any single artist or writer in a society lacking a communal base? What seems to be important to his current work is that each construction not only has the power to maintain a strong visual presence and involve the spectator, but also appears to be an implicit critique of our loss of direct experience.

Griffin had previously addressed the fugitive aspects of contemporary life by criticizing the obsolescent nature of our society through his momentary pins. In effect, they functioned polemically by attacking the social and economic wellsprings from which they arose. But how do the current constructions operate at the visual and critical level? There is obviously no way one can return to that "golden age" of communal and direct experience. It is also apparent that the artist can only bring about a synthetic form of experience in the visual arts within the traditional media categories. It is perhaps in the artist's attempt to recreate those lost collective experiences that have disappeared in modern life, or to generate a feeling about his work pointing to that same loss, that the alienating aspects of modern life can be sensed.

For example, in Griffin's trompe-l'oeil polychromed and steel construction, *Rug, Rocks, Books and Bird Houses* (1984), he juxtaposes a series of representational images that pull the eye upwards like a film unwinding to its eventual denouement. One moves from the ruglike grid at the base, to rock, tree trunk, a series of increasingly larger wedgeshaped slabs connected to rods supporting a book in the middle (Luhan's *Winter in Taos*), a sinuous branch extending upwards, culminating with a bird house. The effect from a distance is like a silhouetted arabesque or antennaelike structure resting in space. But it is in the details that the spectator becomes involved in processing the visual forms encountered. Form, color and texture are contrasted in a way reminiscent of Cubist, Surrealist or Baroque decorative juxtapositions, stream-of-consciousness writing or cinematic editing procedures.[15]

Once one encounters the piece up close, the eye "cuts" up, across, down and back again from one component to the next. One is reminded of the filmic *faux accord* technique, or flashbacks, which allow the filmmaker to create dislocations in time and space while maintaining continuous movement. But instead of time moving forward with an end in sight, one can stop, compare, contrast and piece together the elements of this "visual text" and create one's own "story" at any time.

But doesn't a format like this cater to Modernist conventions and fragmentary information? Yes, but this might well be the point of Griffin's need to oppose the notion of storytelling in the traditional sense with fragments from his memory and experiences. Through the process of juxtaposition one recognizes the lack of meaning and community in modern society. The method of structuring his creative universe points out that we can only operate metonymically, a part for the whole. There is no better example of this attempt to universalize exerience through the particular than *Rugs, Rocks, Books and Bird Houses.* The title gives us a series of plural references to objects we all can associate with easily. Yet, what we experience at a visual level is one rug, rock, book and bird house, or, we might say in a more general way, everyone's rock.

In contrast to the more sculpturally oriented constructions, *Blue Gate* (1984) and his chair, ~~*Restored, Renovated*~~, *Repaired* (1984) are functionally ornamental constructions resonant with multiple associations. *Blue Gate,* for example, explores the functional and the useless simultaneously by allowing one to enter the visual field of activity without recognizing its utility. One realizes immediately by zeroing in on the illusionistic visual mix of objects—tree stump, birdhouse, canoe, rose, barbed wire, repaired and nailed broken

pieces of wooden slats—that Griffin is fascinated with using representational elements as a form of ornamentation. Their juxtaposition bypasses the abstracted and formal nature of ornamentation that is most often found in contemporary ornamental ironwork. Griffin was familiar with Saarinen's gates at Cranbrook, the gates of Albert Paley and was most likely conscious of gates and their relationship to the history of the decorative arts.

In looking at the suggestive formal and conceptual relationships used in this gate, Griffin conjures up a whole series of references. The thorns of a rose's stem are contrasted to the barbed wire (the natural versus the manmade), or the idea of a barbed-wire fence being used as a barrier or enclosure to keep animals penned in, is subtly opposed to the notion of a gate with its allusions to entering and exiting. The gate, when viewed more closely, is in a state of disrepair and is temporarily held together. This is an example of what Griffin calls "design by necessity" (e.g., using a coathanger to hold up a muffler until one got to Midas).

Griffin's chair, ~~*Restored, Renovated*~~, *Repaired* (see *Cover*), has obviously been conditioned in part by the contemporary furniture movement and the Postmodernist overload of appropriated images, forms, style and concepts from previous art movements, artists and the decorative arts.[16] When he arrived at Cranbrook Academy of Art in 1984 to teach and direct the Metalsmithing Department, Griffin came into contact with the design legacy of Saarinen and Eames. His chair is a whimsical yet reverent homage to Charles Eames' DCM chair (1946). The mottled cowhide and the shape of the chair are visual footnotes to the DCM designed by Eames. But Griffin makes his "conceptual repairs" in terms of his own regionalist and bricoleur sensibility. Instead of rubber shock mounts on the legs, a cowboy boot is used on the right front leg. This sets up some interesting juxtapositions when one finds one's own shoe adjacent to a cowboy boot. There are infinite potential sitters with infinite possibilities of shoe to boot relationships. Randomness and chance enter the picture by the participation, dress code and physique of each individual sitter.

There are some interesting ironic twists in this work when seen in relation to Eames' and Duchamp's concepts. Eames' molded plywood seats were conceived as functional design and meant for mass consumption. Griffin's chair represents the opposite, being one-of-a-kind and expressing the idea of transience. Yet, the Eames chair seems deceptively fragile in its delicate line and presence. The erroneous notion is dispelled by knowing that the design and molded plywood process make it extremely strong. Griffin's chair, on the other hand, is a symbolic reference to ephemerality (e.g., the temporary repair job of the chair's back). Like Duchamp, he even plays with the title in order to reinforce the idea of the chair being "repaired." What interests Griffin is the trace of human presence in the chair's repair job and the way he has "crafted" his steel chair, rather than its potential as an anonymously produced designed object.

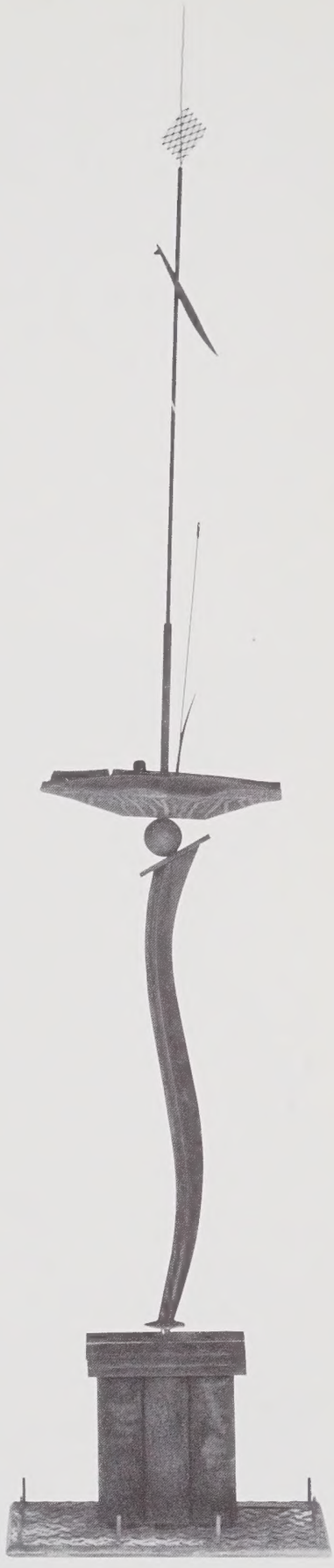
In contrast to Duchamp's readymades, Griffin doesn't literally use a functional object and divest it of its utility in order to make it "art." Instead, Griffin first "makes" his chair. It is not a found object selected by a gratuitous process of indifference. But Griffin does appropriate a style of chair (in this case the Eames chair), replicates it partially and repairs it in some ways like Duchamp's rectified readymades, and reinvests it with recognizable symbols. Above all, the chair still functions, where the *Fountain* or *Bottlerack* of Duchamp maintains its enigmatic relation to the the idea of usefulness by denying its function. The distinction between Duchamp and Griffin can be summed up in their approach to the spectator. Duchamp distances himself and his art from the viewer. It is an art that is hermetic and puzzling. Griffin attempts to close the gap between the spectator and the work by making it accessible and humorous. This is possible because the work is an open text, consisting of a set of common symbols, and not a solipsistic meditation.

The phases of Griffin's development illustrate a distinct progression from a mechanistic perception of the world to a humanistic one. He has had to clear away an imaginative space for himself that makes the decorative arts (particularly the ornamental aspects) and other influences from Modernist and Postmodernist developments his own. This has necessitated a form of internal criticism through which he raises polemical issues within his own work to move from one area of concern to another. One also finds within his work a way to critique a society that has seemingly lost its ancient communal bonds. This is done through a dialectical approach, pitting natural against manmade, permanence against transcience, ideal against pragmatic, anonymity against individuality, objectivity against subjectivity. All of these opposites are summed up in what Griffin calls the "simultaneous existence of extremes."

It is also easy to sense, in retrospect, the basic utopian and ideal beliefs that were so strained in his earlier machine-tooled ornaments of the late 70s filtering through his current work. The seeds of this brand of social idealism can be traced from Ruskin and Morris in the 19th century to social critics like Walter Benjamin in our own century. But can a brand of idealism seeking to find common denominators and images effectively reinstate a communal sensibility today? This is the question Griffin appears to be addressing at the moment, and it is worth the risk to pursue it.

Notes

1. Statement "On Recent Work" for an exhibition at the Helen Drutt Gallery in Philadelphia, Pennsylvania (September 22–October 10, 1981).
2. See Harold Bloom, *The Anxiety of Influence.* New York: Oxford University Press, 1973. Pages 5–92 are important for Bloom's premise about the anxieties of influence a poet has with his precursors. However, in art, just as in poetry, influence doesn't necessarily make the work less original. See also Harold Bloom, *A Map of Misreading.* New York: Oxford University Press, 1975.
3. Gary Griffin, "Machine Tool Technology: An Aesthetic Application." *Goldsmith's Journal,* June 1978, pp. A–L.
4. *Ibid.*
5. *Ibid.*
6. See Jeremy Rifkin, *Entropy: A New World View.* New York: Bantam Books, 1981, and Rudolf Arnheim, *Entropy and Art: An Essay on Disorder and Order.* Berkeley: University of California Press, 1971.
7. Jeremy Rifkin, *Entropy: A New World View.* New York: Bantam Books, 1981, p. 6.
8. *Ibid.,* pp. 33–44.
9. This quote is derived from Gary Griffin's statement concerning his ideas about momentary pins in 1979.
10. Charles Baudelaire, *The Painter of Modern Life and other Essays.* Trans. Jonathan Mayne, New York: Phaidon Press, 1970. p. 12.
11. *Ibid.,* p. 13.
12. This quote is taken from an interview between Roy Slade and Gary Griffin for Griffin's exhibit at Cranbrook Academy of Art February 5–April 7, 1985, "Gary S. Griffin, Recent Works in Steel."
13. Walter Benjamin, "The Storyteller", *Illuminations.* Trans. Harry Zohn. p. 92.
14. *Ibid.,* p. 89.
15. In my discussion with Griffin in March of 1985, he mentioned the editing procedures of *Apocalypse Now.* In particular he cited the scene in which Martin Sheen is lying down and viewing the fan above before it cuts to a sequence of rotating helicopter blades. Griffin has always had a penchant for formal connections and this is a perfect example of this sort of comparison done cinematically.
16. In 1977 *Art et Industrie,* under the direction of Rick Kaufman, initiated the current strain of art furniture in America. The polemically inclined Memphis group of Ettore Sottsass as well as the designers Main & Main have also been influential in determining the course of art furniture.



I Wish I'd Known Herbert, steel, 117 x 12 x 24", 1983

C.E. Licka is an Assistant Professor of Art History at the University of Southern Mississippi and a contributing editor to this magazine.

THE VO GALERIE

A EUROPEAN JEWELRY SHOWCASE IN THE AMERICAN CAPITOL

This is the first in a series on galleries that specialize in jewelry and metalwork

by Roger Kuhn

The new wave of European jewelry that has been lapping at America's shores for two decades may be approaching high tide. In June of 1984, "Jewelry International" was shown at the American Craft Museum II in New York City, the first wide-ranging survey of innovative European jewelry to be seen in this country. And in September, the VO Galerie opened at 2000 Pennsylvania Avenue in downtown Washington, just four blocks from the White House, offering the first comprehensive collection of such work for sale to the American public.

Until quite recently, the movement that began in Holland and Britain in the early 1960s was known in this country principally to those who, by profession or avocation, follow new developments in jewelry design. Collectors visited Galerie Ra in Amsterdam or Electrum Gallery in London and bought a few pieces; metals teachers on travel grants saw exhibitions in the Schmuckmuseum or Goldsmith's Hall and brought back catalogs to show to their students; gallery owners saw the work of Emmy van Leersum or David Watkins, but few ventured to test the American market. The rare exhibit that came to the United States, like "Objects to Wear" in 1970, may have inspired some American jewelers, but it evoked little public notice or response.

In December, 1981, however, "Good As Gold: Alternative Materials in American Jewelry" opened at the Renwick Gallery of the National Museum of American Art in Washington and for the next three years toured the United States. Though consisting only of pieces by jewelers working in this country, the exhibition affected attitudes towards European work as well. It legitimized, for the American public and for American jewelers alike, unconventional materials and forms, and it suggested a reexamination of some basic preconceptions about jewelry itself. "Good as Gold" was followed by the smaller, more radical "New Departures in British Jewellery" at the American Craft Museum in 1983 and by "Jewelry USA" and "Jewelry International" a year later.

Still, it is one thing to mount a museum exhibition devoted to innovative jewelry and quite another to open a rent-paying, tax-paying gallery to sell such work; and it took a good deal of courage for Joke van Ommen, a Dutch-born jewelry designer, and her partner, Jan Maddox, a metals teacher, to launch the VO Galerie. Little work of the sort they intended to show had ever been seen in Washington, and since it had never been offered for sale in such profusion anywhere in the United States, no one could forecast the public's response.

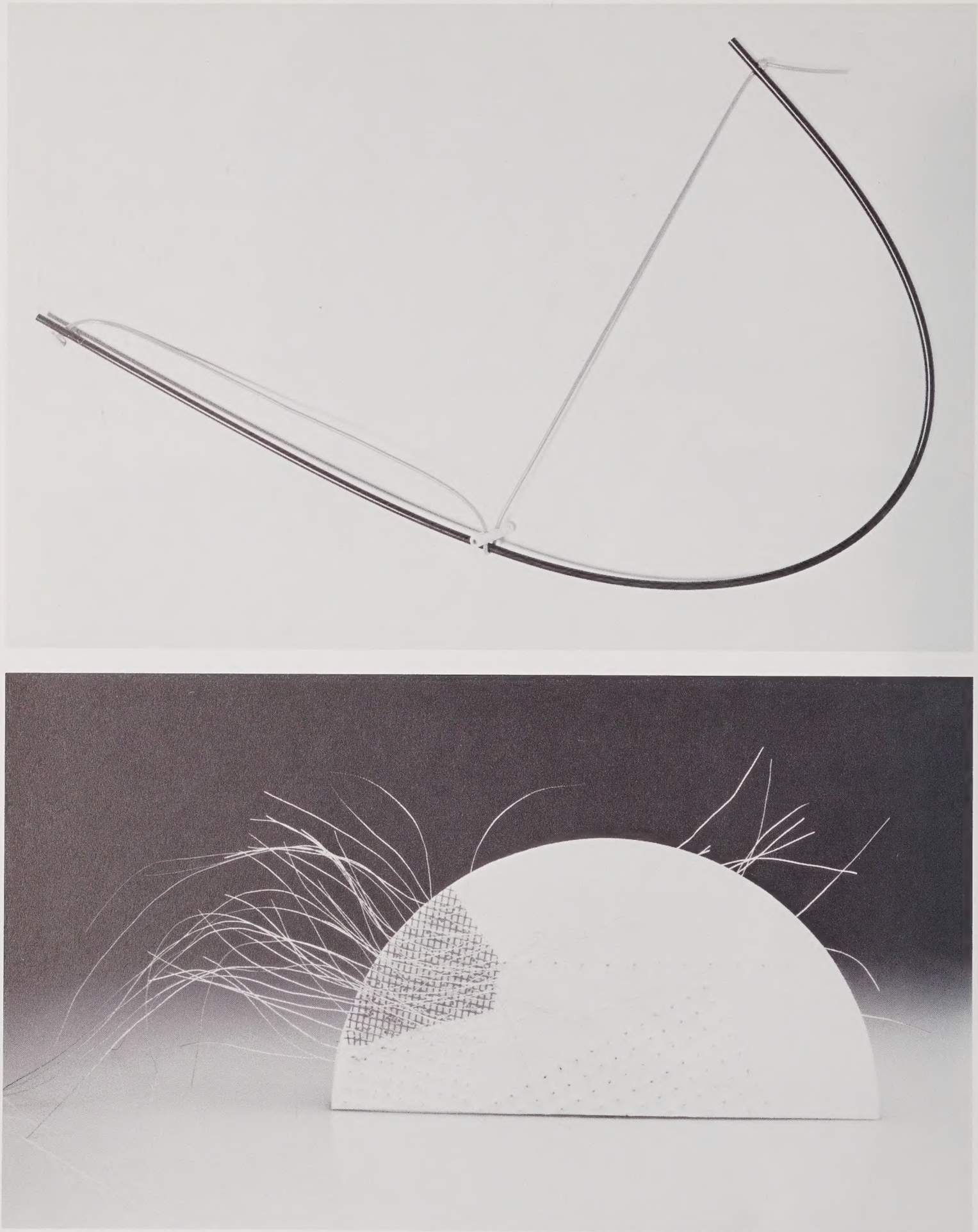
The VO Galerie reflects van Ommen's philosophy and experience, shaped by innovations in Dutch jewelry during the late 1960s and 1970s. After earning her Doctorate in art history at the University of Amsterdam in 1974, van Ommen began to work in jewelry as an apprentice to Erika Leitner in Zambia. She moved to Vienna in 1976 to sutdy at the Hochschule für Angewandte Kunst and privately with Peter Skubic. Two years later she returned to Amsterdam as an independent jewelry designer; and by 1980, when she migrated to the United States with her American husband, her work had been exhibited widely in Europe.

At first, van Ommen felt artistically estranged in this country. She found herself philosophically at odds with much of the jewelry being made here, with its stress on technical virtuosity and sculptural form. By the same token, few American jewelers, galleries or buyers seemed to understand her work or the objectives it embodied. With the passage of time, however, van Ommen has come to feel more open to work being done here, while many American jewelers have seemed to move closer to her own concept of what jewelry should be. In consequence, the VO Galerie shows pieces by such Americans as Robert Ebendorf, Gretchen Klunder-Raber and David Tisdale alongside the European work. And as a further sign of this rapprochement, in the year that the VO Galerie opened van Ommen's work was awarded the grand prize in *Ornament* magazine's jewelry design competition.

The gallery carries the work of 50 to 60 jewelers in its permanent collection at any one time. Most of it is displayed on simple, clear plexiglass shelves ingeniously suspended between floor-to-ceiling steel rods, and in one large glass case. Additional pieces are kept in a set of drawers by the sales desk. Regular artists include such leading international names as Susanna Heron, Paul Derrez, Georg Dobler, Esther Knobel and Therese Hilbert, and lesser-known talents such as Eleonoor van Beusekom, Laura Biscotto, Giorgio Cecchetto, Malka Cohavi and Liesbeth Rahder.

Five or six times each year, VO Galerie features a larger body of the work of a single designer. The 1985 schedule exemplifies the gallery's adventurous approach. It includes two exhibits of fabric neck and body pieces, one by Susan Sanders, a young American working in New Paltz, New York, and the other by Joke Brackman and Claudie Barbée, well-established Dutch jewelers. Another Dutch designer, Hermann Hermsen, will show both jewelry and lamps. Additional shows are scheduled for Friedrich Knupper, a German with a growing reputation, and for Joanna Hess-Dahm, the Swiss jeweler. These will be the first American exhibition for all of these artists.

Above: Joke van Ommen beside the window display at VO Galerie; **opposite page**: This 1984 paint and canvas neckpiece by Joke Brackman and Claudie Barbée (Holland) raises the question whether there is any clear dividing line between jewelry, defined as body adornment, and clothing



Top: This 1982 neckpiece of plastic tubing by Julia Manheim (England) exemplifies the graphic quality of much new European jewelry, innovative approach to attachments and a desire to allow the wearer to participate in shaping the piece. By sliding the short piece of tubing along the long one, both the size of the neck opening and the shape of the piece can be changed. Photo: Colin Cuthbert; **above**: This 1984 brooch of paper, thread and screening by Marjorie Schick (United States) shows remarkable sensitivity in the use of everyday materials. By punching holes in the paper, a delicate white-on-white pattern is created in the large, solid shape, which is also set off against the fine lines of thread and screening. Photo: Joel Degen

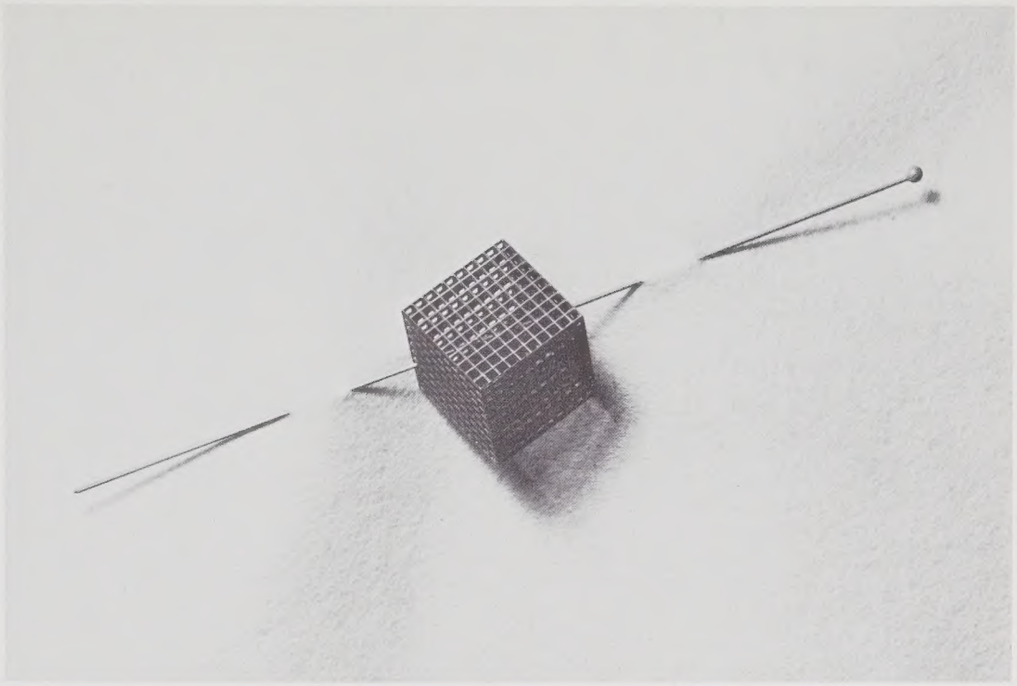
The work shown at VO Galerie embodies van Ommen's personal concept of jewelry. She believes in jewelry, first and last, as body adornment, not as sculpture in miniature. Like Otto Künzli's thumbtacks, it need not be interesting when lying on a shelf, but it must spring to life when worn. It is the direct relationship to the body or to clothing that validates a piece as jewelry. With this basic criterion in mind, van Ommen looks for work that embodies a striking idea about adornment—something original, clever, provocative, witty or elegant — in the form, the materials, or the way it is worn. Novelty, however, is not enough: the idea must be well-developed, the resolution practical, the materials logically related to the design and function and the craftsmanship impeccable. Except as part of a larger body of the work of a featured jeweler, the gallery does not show the experiments of some Europeans that test the boundaries of wearability. The focus is on work that appeals to van Ommen's own esthetic—jewelry that displays a delicacy and sensitivity and that can give enjoyment to both wearer and viewer.

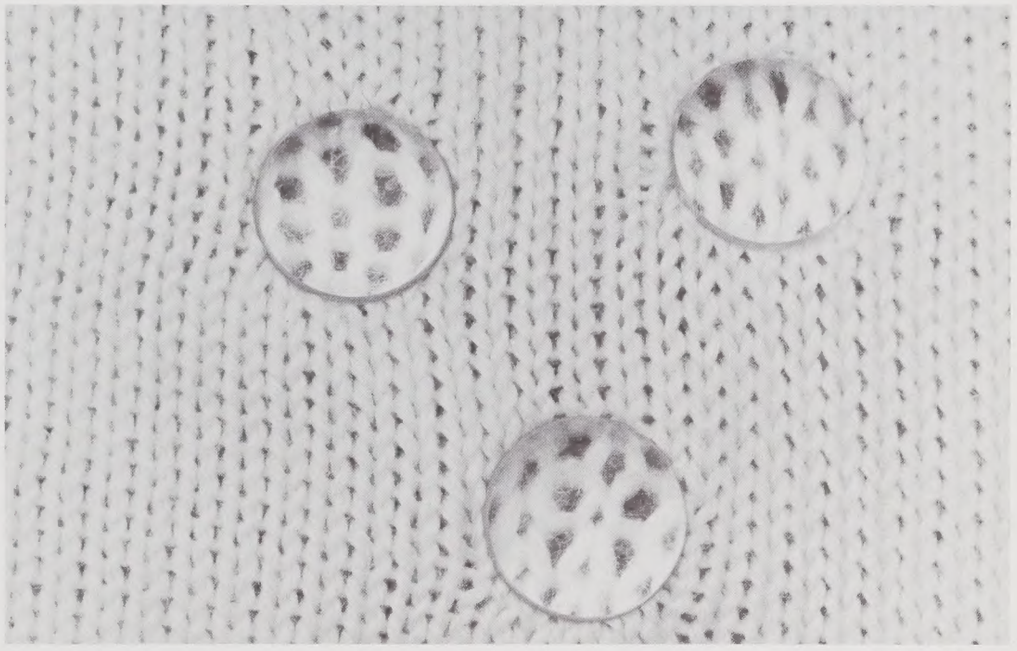
Having studied, worked and exhibited in Europe, van Ommen knows personally most of the jewelers whose work she carries, and one of her motives in establishing VO Galerie was to provide her friends with the American outlet they had long been seeking. But her principal objective was to create an American showcase for the new, European-based approach to jewelry, to expose it to a public to whom it was quite unfamiliar and to test her belief that Americans would respond favorably to its inherent merit.

In fact, the public's initial response has confounded the skeptics and cheered the gallery's owners. The typical window-shopper reacts with curiosity, amazement and delight. Predictably, among the most accepting are people who have traveled or lived in Europe, many of them workers from the nearby offices of the World Bank; and collectors are among the major purchasers. But stereotypes don't stand up: Middle-aged men in three-piece suits are delighted to find something new and different to buy for their wives. And surprisingly, although the gallery sits on the edge of a university campus and carries much inexpensive work, few students are among its customers. Most buyers are in their 30s and older.

With sales and clientele growing, one can hope for financial viability, but it is still much too early to tell. Regardless of its commercial success, however, VO Galerie has already demonstrated what its founders hoped to prove: that Americans will accept—enthusiastically—the new approach to jewelry that the gallery represents.

Roger Kuhn, an enamelist living in Bethesda, MD, is currently president of the Washington Guild of Goldsmiths.





Right, top: This 1984 brooch of lacquered steel and oxidized silver by Friedrich Knupper (Germany) illustrates how technical perfection can serve a concern for delicacy. Because the pin can be inserted in the cube in infinite ways, the wearer determines the brooch's configuration. **center:** These 1981 multiple brooches by Maria Hees (Holland) are made of plexiglass, shaped to magnify the fabric, to which they are attached from behind with a rubber ring. The fabric thus participates in the jewelry. **bottom:** This 1981 earring of 14k gold by Hermann Hermsen (Holland) achieves three-dimensionality with a single wire

MASTER METALSMITH: ALAN ADLER

by Rebecca Adler

Introduction: A Revisit with Allan Adler

I first discovered Allan Adler's Silversmithing Shop about 23 years ago when I arrived in Southern California to begin my metalsmithing teaching career at California State University, Long Beach. His shop was located on Sunset Boulevard in Hollywood; and I must have gone in numerous times to admire the work on display. His clean, unadorned and well-crafted style was strongly influenced by the traditional work of early American silversmiths and the contemporary work then being done in the Northern European countries of Denmark, Sweden and Norway. It was a unique and one-of-a-kind style of silversmithing.

Eventually I introduced myself to the shop personnel and asked if I could bring my students in for a tour of the shop and studio work area. I don't remember meeting Allan himself, but there was always somebody there to show us around and take us into the work area where one of the skilled craftsmen always forged a spoon for us from a bar of sterling silver.

What I remember most vividly is the large collection of silversmithing hammers hanging on the wall as you would come down the narrow cellar stairs into the workshop. Those hammers always stuck in my mind. When I learned of the tragic fire that destroyed the showrooms and workshop five years ago, all I could think of was those hammers. What does one do after a fire destroys one's shop and studio? Allan salvaged what he could and waited with the hope that the shopping complex owner would rebuild. After a year went by with no sign of reconstruction, Allan decided he would build a studio and small showroom in his home. Trying this arrangement for a year he realized he wasn't getting his work done because of the proximity of the work space to his living space. Finally Allan decided to move the workshop to a home formerly owned by his father-in-law, located in the San Fernando Valley.

The nondescript house surrounded by a four-feet high chainlink fence sits on a quiet residential street. Behind this fence roam two barking Alaskan Huskies. On the day I went to visit Allan Adler, I was greeted by these two barking dogs, but knowing Allan I decided they couldn't be dangerous, so I opened the gate and walked up to the door. The entry led directly into a living room, concrete-floored workshop. The first to greet me was Jimmy Nadasi, a European-trained craftsman, originally from Hungary. As in years before, Jimmy was later asked by Allan to demonstrate the forging of a baby spoon from a sterling bar. Allan came out to greet me, and we got right into a conversation about the fire of five years ago and what he had done since that time. Allan often excused himself to answer the phone and deal with the various problems that came up. I wandered around the shop watching two younger craftsmen working on the jewelry side of the business.

Opposite page: Leaf pattern water kettle with burner, sterling silver with ebony handles; **top:** Allan Adler's shop on Sunset Boulevard in Hollywood; **above:** Jimmy Nadasi forging a spoon

Allan Adler's shop does both traditional and contemporary silversmithing and jewelry. At first I thought there wasn't enough equipment here to do the traditional Allan Adler line of holloware and flatware. However, later, on a more extensive tour conducted by Dorien Lohmeyer, the shop's manager, I was taken into the heavy equipment room that was once a two-car garage. There, salvaged from the fire and rebuilt, was a large power rolling mill, a power flatware blanking press, a drop hammer used to form the bowls of spoons and an old-but-adequate belt-driven spinning lathe. The walls were lined with shelves of steel blanking dies used to create the many flatware patterns that Allan has designed and still makes. Unfortunately, the large collection of wooden maple spinning chucks had been destroyed in the fire. At present, though, as the need arises new ones are being made.

Allan rejoined me at this point, showing me the special features of the outboard rollers designed to roller forge parts of flatware patterns he still gets orders to reproduce. Previously, out in the workshop, I couldn't help noticing a written order for a flatware service for 12 that was sitting on a bench with the estimated cost in the five-digit range. Allan's fine silverware commands a price befitting its quality.

Allan remarked his biggest problem in production was finding people who could spin silver. He is currently training a retired friend, who, at 70, thinks it would be fun to learn a new trade.

We left the studio at noon to visit his home. Over a pleasant lunch, we talked about his recent trip to Mexico, where he discovered beautiful, raised copperware forms. The forms are made in the area surrounding Villa Escalante, a small town in the state of Michoacan; the town is sometimes referred to by its old name of Santa Clara del Cobre. We also talked of his method of casting silver ingots. Allan uses oak charcoal to cover the silver while it melts, then adds a small amount of phosphor copper to the silver scrap and pours the molten metal through an annealing flame into a preheated, tallow-coated ingot mold.

His family, his love of the time spent on his boat and dreams of the future occupy Allan's thoughts these days. He would like to someday rebuild his shop and showroom on its present two-acre site in the form of a living museum so that his daughters and sons-in-law could continue his business and craft after he is gone. He would like to show how a silversmith worked in the latter part of the 20th century. (The concept of a living museum is one that should be seriously considered by craftsmen in this country as a means of preserving the history and technique of their craft. Japan has many such opportunities to visit the home and studio of past national living treasures.)

Among Allan Adler's many awards and distinctions is his recent selection to be part of an exhibition entitled "Living Treasures of California," held at the Crocker Art Museum in Sacramento, California. Allan was one of four metalsmiths chosen among the 19 California craftsmen so honored at this exhibition.

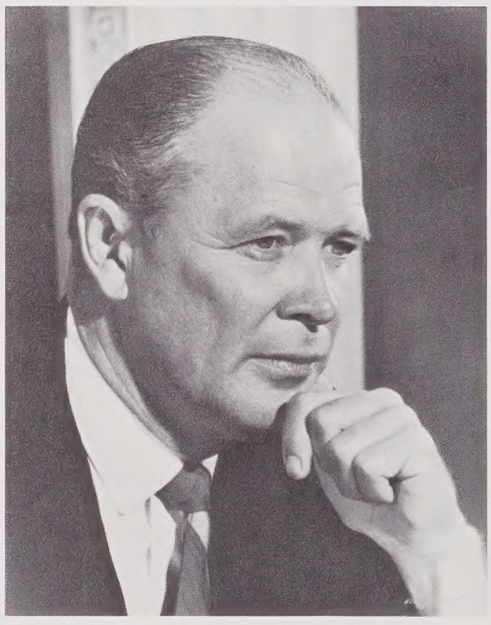
We had to end this pleasant visit as Allan had to attend to some pressing business and I had to select photos from his photo archives (they miraculously survived the fire).

There aren't many dedicated silversmiths like Allan Adler. I was pleased, honored and delighted to have become, once again, acquainted with him.

—Alvin Pine

As a young man of 19, right out of high school, Allan Adler worked as a lathing contractor with his own crew of men in association with his father who was a plastering contractor in Burbank, California. At about this time, 1937, we first met and nine months later we were married. Since my father, Porter Blanchard, a well-known silversmith, had no sons and wanted someone to carry on the craft, he urged Allan to come to work for him and learn the trade of silversmithing. Allan and I gave it a lot of thought, because it meant living on a much smaller income, but finally we decided to give it a try and he went to work learning all phases of the trade. In no time he developed a burning desire to do his own designing, with strong leanings toward the unconventional, and the opportunity soon presented itself when his father-in-law decided to give up his retail store and do only wholesale business. Allan felt that it would be a great mistake to give up the retail operation, which was located on the famed Sunset Strip in Hollywood. So, with Porter's approval, Allan took over the store, starting in business for himself with lots of enthusiasm and very little money.

As a young craftsman, beginning his own business on a shoestring, he would attack



Top, clockwise from top: Set of vegetable serving bowls on tray, Sunset pattern dressing fork and spoon, one pair each large and small Sunset pattern salt and pepper shakers, Chinese Key six-piece place setting, napkin ring and napkin clip, all sterling silver; **above:** Allan Adler

problems head-on. His ingenuity made it possible, many times, to accomplish a task with a makeshift tool when he could not afford to buy the specific tool that he needed. These tools were usually small ones and were eventually replaced with a new one. However, the method of grade-rolling silver he developed was useful for the rest of his life. The actor, James Gleason, came to Allan to study with him and to learn silversmithing as a hobby. He became aware of Allan's ability to devise his own tools from things at hand and to accomplish a job without having to lay out the money for a new tool. He dubbed him "Tools Adler," and every once in a while he would surprise Allan with a gift of a new tool. Margaret Sullavan, the actress, was also a student of Allan's at his Sunset Strip workshop. Allan only took a few private students into his shop to learn jewelrymaking or silversmithing, because he was actually too busy making a living for himself and his family.

The Second World War catapulted the Adler business from a one-man operation into a much larger one with about 25 fine craftsmen. Because of his expertise in silver, Allan was approached by the Gilfillan Company to bid on the job to make a highly classified silver

item. He was awarded the contract and this put him in a deferred class, keeping him out of the military service. The contract lasted until we dropped the H-bomb on Hiroshima and Japan surrendered. After the contract was cancelled, Allan was promptly drafted into the Army. He was only in the Army for about six months, due to a health problem that caused him to be medically discharged. It wasn't until after the war that Allan learned that the item he made for Gilfillan was a part of their highly secret new radar equipment.

In the early 40s, Allan began designing flatware, which were seen as new and simple, even though he was influenced by the traditional three-tine fork and the oval bowled spoon. His designs were esthetic but always functional. He approaches the design by creating an image in his mind long before putting it down on paper. He feels that there is a *fine line* in design between the good and the ugly. In order to achieve the former, he often makes a wooden model of the item he is planning to make and then sets it on a bench in the shop so that he and the various other craftsmen can study and discuss it at length.

After the war, stores throughout the country, like Nieman-Marcus, B. Altman, Marshall Fields and Garfinckels were clamoring for his merchandise. This enabled Allan to gather together a group of the finest craftsmen in the country, men who had learned their trade in Europe and had come to the United States seeking work with large companies here, as well as craftsmen who had established their own businesses. They were much older than Allan and, therefore, not needed by the military. With this fine group of craftsmen, he was able to design and produce, and this capability, in a sense, allowed him to explode upon the scene, becoming more and more well known as he designed for the "Hollywood Greats." Many custom pieces have been designed for people, such as a sterling silver baby potty for Jascha Heifitz's firstborn. He had Allan engrave a musical staff around the potty with a special tune he composed.

Top: Teardrop pattern coffee and tea set; sterling silver with ebony handles; **above:** Starlit pattern sugar and creamer, sterling silver

Clark Gable and Carole Lombard had Allan make a dozen tall, slender pewter mugs, especially monogrammed and with ebony handles that they gave to Jack Benny and Mary Livingston for a Christmas gift. Shirley MacLaine was given one of Allan's tea sets as a Christmas gift and Julie Andrews and Petula Clark both have his flatware service. Another movie couple Robert Taylor and Barbara Stanwyck have had

things designed for gifts, as did Dinah Shore, who loved working out ideas with Allan.

Frank Sinatra has been a special customer, over the years, giving a flatware service to his daughter and designing special picture frames as gifts. When he and Barbara were married, they ordered frames to hold their wedding pictures and sent them to friends, as gifts, all over the world. Making special pieces for actor Paul Newman, who has been a customer for many years, has been great fun for Allan. Paul loves to do special gifts for his wife, Joanne Woodward, and for friends and relatives. Two more movie greats customers Robert Wagner and Natalie Wood also loved working out original ideas for gifts.

During Adlai Stevenson's presidential campaign, *Life* magazine printed a picture of him on the campaign trail, relaxing with his legs crossed and the sole of his shoe facing the camera, with a big hole in it. The Democratic party had Allan design a campaign button for them: a sterling silver sole of a shoe with a hole in it.

Governor Pat Brown and his wife had Allan design a special pattern of flatware for the Governor's mansion that had the state's official seal on each handle. Katherine Hepburn also

Top: Individual coffee server with warmer and cigarette container, sterling silver; **above:** Aladdin lighter, sterling silver

loved working personally with Allan and over *most* of his career he has cherished her as a customer. Director George Cukor used to bring in a long Christmas list that he had Allan furnish gifts for, as did another director, Arthur Lubin, who was famous for the Abbott and Costello movies, The Francis and Mr. Ed series.

A different facet of Allan's career was his love of jewelry, silver and gold, and he went all out on designing things never before attempted, such as his pioneering idea of setting a diamond to hang on the side of a ring band instead of the traditional setting in the center. Although his desire to have semiprecious stones cut in unconventional shapes led him to lapidaries, they maintained that what he requested couldn't be done. Allan persevered, however, and finally got a lapidary named George Huston to cut some for him. They were stunningly set and a huge success with customers— Mrs. Gary Cooper had one of the first ones and she said that she loved it above all of her other jewelry. This freeform cut developed a trend that was widely followed by other jewelers in the 40s and 50s, and Allan always considered it a compliment, inspiring him to move ahead to newer ideas.

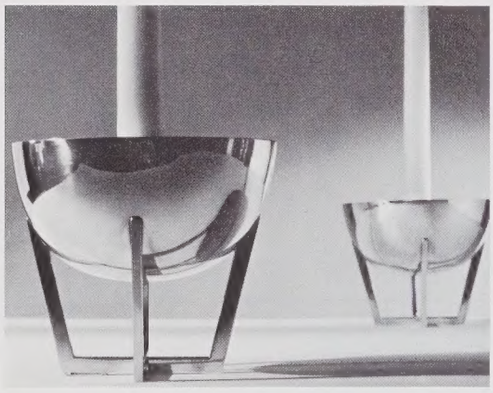
One of his most exciting commissions came

from Convair Aviation Company when they asked him to design a pin to be worn by the first seven astronauts chosen to go into space. It was designed after the symbol of one of the planets, and the design is also used at the entrance of NASA headquarters in Florida.

Among the many honors bestowed upon Allan was the Good Design Award in 1956 by the Museum of Modern Art for his Sterling Water Pitcher. In 1982 he was invited to participate in the "American Metalsmithing and Jewelry in the 1940s and 50s" conference, sponsored by the Renwick Gallery, The Archives of American Art and *Metalsmith* magazine.

Allan Adler never had any formal art education, learning his skills of craftsmanship from his father-in-law and his association with other master craftsmen, while his own flair for design was a totally natural ability. Ancient cultures fascinated him and he looked to pre-Columbian art for inspiration, as well as our own Paul Revere's clean lines and workmanship.

Allan feels strongly that simplicity is a plus, that "gingergbread" is out and that design must always be functional. His personal philosophy is that anyone can live elegantly. For example, a hamburger patty cooked with wine and herbs, candles for light and soft music for background can make for gracious living and a world of wealth that can fit into anyone's budget. A craftsman or artist need not be rich in dollars but can be rich in talent and often will be much happier and more satisfied.



Top left: Town and Country pattern salad serving set, sterling with ebony handles, Teardrop pattern salt, pepper and sugar shaker set, sterling silver, Modern Georgian pattern dessert spoon, sterling silver; **top right**: Starlit, Modern Georgian, Sunset and Swedish Modern spoons, sterling silver; **above**: Grecian Fire candlesticks, sterling silver

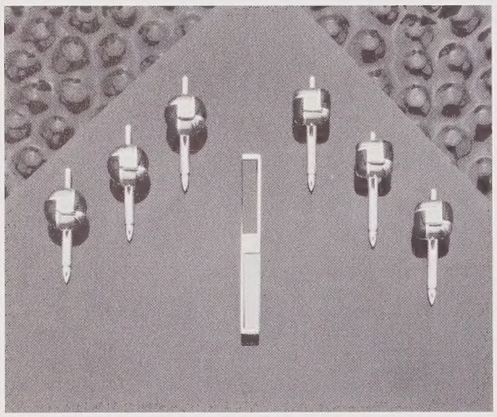
Allan is still designing and working at his craft because he is the kind of man who must be creative and active to be truly happy. He is training people, especially one young woman, Dorien Lohmeyer, to handle all aspects of the work, thereby passing down his knowledge just as his father-in-law did before him. He still has a retail store in LaJolla, California, a studio where he sees people by appointment in Studio City, California, and his workshop in the San Fernando Valley. Retirement is not in his future, but spending more time at sailing on his beloved Shawnee is.

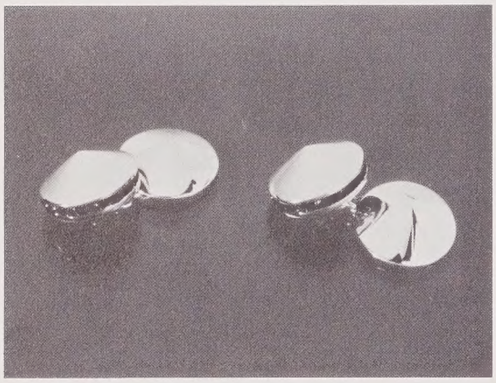
Alvin Pine is a professor of metalsmithing and jewelry at California State University, Long Beach.

Beyond the Bench

by Akiko Busch

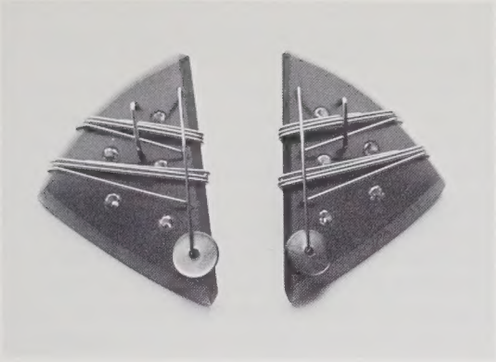
This is the fourth in a series of articles about production jewelers: design, marketing and business





DIANA VINCENT CO.

Bucks County, Pennsylvania
Designers: Diana Chrambanis and Vincent Polisano
Description of Jewelry Line: The clean mechanics and high-polished look of classic fine jewelry in 18k yellow gold and platinum with diamonds and colored stones. The line has been selling for three years and new pieces are added to it as they are designed with little acknowledgment to trend or fashion, or even specific markets. Except for some casting, all work is made in-house to ensure quality.
Business Setup: A partnership that employs three full-time employees, all with backgrounds in art metalsmithing. Because this work is high-end—earrings can retail from $400 to $3,500 and necklaces from $2,500 to $6,000—it does not sell well at craft fairs. DV shows twice a year at the Retail Jewelers of America Show and also personally takes work to galleries and stores. Pieces are sold wholesale, as well as on commission, and the line is advertised nationally and internationally.
Education: Vincent Polisano was trained in the jewelry industry and served as an apprentice; Diana Chrambanis received a BFA from the Tyler School of Art where she majored in metalsmithing. Not surprisingly, though neither has had strict business training, Vincent feels that his experience in the industry prepared him adequately for his vocation.



TKO

Milwaukee, Wisconsin
Designer: Alice H. Klein
Description of Jewelry Line: The line straddles high fashion, art and costume jewelry, though it remains visually different from commercial costume jewelry. The clean, tailored lines are executed in acrylic, mother-of-pearl, Formica Colorcore, cubic zirconia and gold-filled or sterling wire. Both materials and process continue to reflect an intrigue with industry. Designs are updated four times a year, partially in recognition of fashion trends. "Ultimately," says Alice Klein, "one would like to become known for products that are changing visually every year, but also retain a style and visual continuity that is unique to oneself. Style is how one synthesizes formal ideas and visual elements through one's materials into objects that demonstrate a highly personal manner of approaching and solving visual problems. If one has a strong sense of personal style, it will permeate all the products one makes.

"When we first started there was a general trend in the craft market, circa 1978, which featured a machined, cool, geometric 'high tech' look. We were using plastics, base metal and sterling silver-inspired cast components that required a great deal of time to fabricate and finish. People were unaccustomed to seeing and paying for plastics combined with base metals or sterling in a cool, tailored manner. Comments generally heard were: "Is this plastic? It's so expensive!" As time went on, the audience gradually developed an understanding of plastic jewelry. "Good As Gold," organized and curated by the Renwick Gallery of the Smithsonian Institution, helped educate the customer and collector to the use of alternative materials. We persevered with showing our product at the ACC Fairs and the Philadelphia Craft Show and we found that our audience was growing by seeing our jewelry as well as that of people like: Vincent Street Studios, Julie Shaw, Thomas Mann, Pinpac Studios, etc.

In the past two to three years we've seen interest in the fashion world for accessories that are fresh and arty looking. So one is straddling both worlds of fashion and art by creating a product that is visually different from commercially manufactured costume jewelry. Since being in the art fashion jewelry area our lines have become less labor intensive than they used to be. Price point is crucial if one wants to sell production jewelry. Boutiques, clothing stores and craft galleries are interested in a product selling as soon as possible. One must create visually exciting jewelry in the most economical way. The production work is one part of an entire product line that also includes limited production and unique pieces. The production work acts as a bridge to the one-of-a-kind.

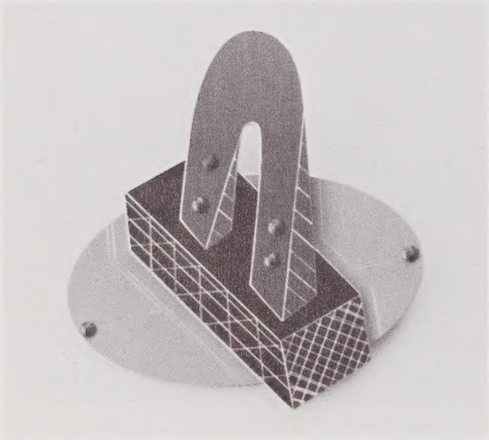
Business Setup: TKO is a partnership between Alice Klein, who designs the line, and her husband, Wyatt Osato, who handles marketing and sales. Ninety percent of the work is sold wholesale, through exposure at craft fairs and trade shows, "a must for finding new accounts and being seen." Direct solicitation and promotional mailings have also proved to be effective marketing tools.

The firm employs five part-time employees in the studio. A full-time accountant and mechanical engineer, together with Klein and Osato, make up a planning team to address the direction of business, sales and design. That TKO has a clearly defined set of goals is among the most important aspects of their business.
Education: Alice Klein received a BFA in metals from the University of Wisconsin and an MFA in metals under Stanley Lechtzin at the Tyler School of Art in Philadelphia. "During graduate school Stanley Lechtzin informed us that there was a scarcity of tenured teaching positions available. So in keeping with the reality of the job market, he devised a production curriculum that was to develop an attitude and method in the creation of production jewelry. Besides the production curriculum he also offered a teaching program. I chose the production program." Her business training has been acquired through experience.

DAVID LAPLANTZ/ DAVID D. DECO

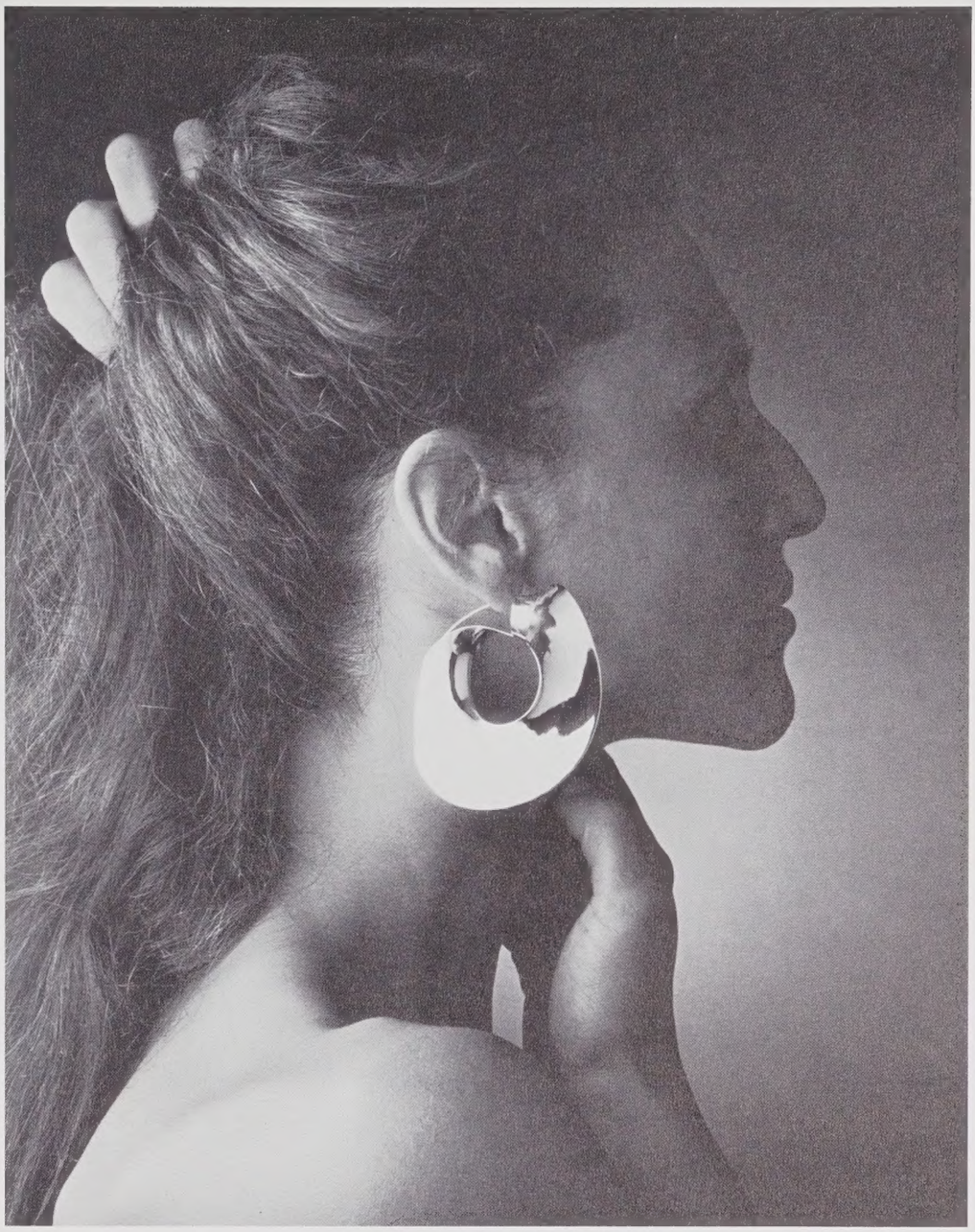
Bayside, California
Designer: David LaPlantz:
Description of Jewelry Line: The line tends towards high fashion, wearable art. Nonprecious materials—anodized and painted aluminum, leather, plastics, found objects, rubber—form colorful constructions that acknowledge fashion, though not necessarily fashion trends. A sense of style, color, variety and timing influence more than seasonal styles. New designs are developed on a daily basis, and LaPlantz puts a high value on risk-taking and the inevitable excitement that comes with making samples and spin-offs that develop into their own series. The line is three-and-a-half years old and addresses a middle-end market, which LaPlantz looks to with assurance: "The public has stayed loyal to David Bowie," he points out. "So why not me?"
Business Setup: LaPlantz makes 90 to 95 percent of his work; the remaining few parts and pieces are found objects. He is the sole owner of his business and has no employees. He enjoys being able simply to depend on himself and so keeps production to between 300 and 500 pieces per year, which for the most part are sold wholesale, although some are sold on consignment and a few on commission. LaPlantz *never* attends craft fairs or expos, finding that he is able to do sufficient business with galleries and stores through the mail or personal visits. Likewise, he has found that reps "never deliver what they promise." In discussing pricing, LaPlantz says, "First, I like to see just what the competition is like. I usually say, 'Hey, I can do better than that and for a better price.' Then I set out to prove my theory to be correct. Why not be cocky? I try to make certain value and design for a certain price. I don't make any earrings for under $30 retail. I don't find it worthwhile making lower priced work. Since my metal (aluminum) is inexpensive, I can afford to create works that can sell for less than my competitors. My overhead is low and my manufacturing time is short. I endeavor to make low-priced, high-fashioned, wearable art pieces that a larger percentage of people can afford. The colors and design will evoke a spark of excitement in the wearers and the viewers. I work fast and try to pay myself anywhere from $18 to $27 per hour. I must work fast to do this. Considering that I teach and work at school for a least 30 to 35 hours per week, I can't afford to waste any of my time."

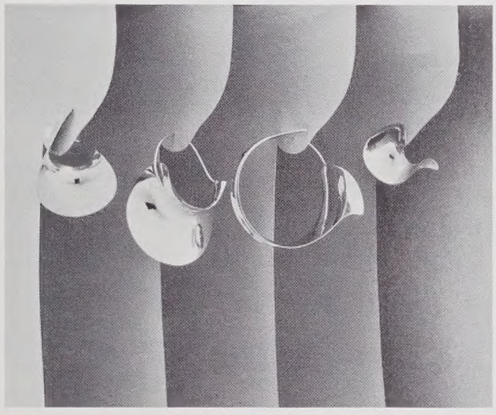
Time is perhaps his most valuable commodity, and it is one he uses economically. Because of his teaching at Humboldt State University, the time spent constructing pieces, pricing, packing and doing paperwork is managed efficiently, sometimes even with a stopwatch. Likewise, uneventful faculty meetings are a time to catch up with client correspondence. LaPlantz finds that teaching balances well with making the pieces. "Both create new stretches of the imagination, much like a ligament allows us to stretch our arms and legs, to walk better, and more upright."
Education: LaPlantz attended Bowling Green State University in Ohio and did graduate work at Cranbrook Academy of Art. Workshops he has taken and taught make for a continuing education program, as does simple experience and "flying by the seat of the pants."

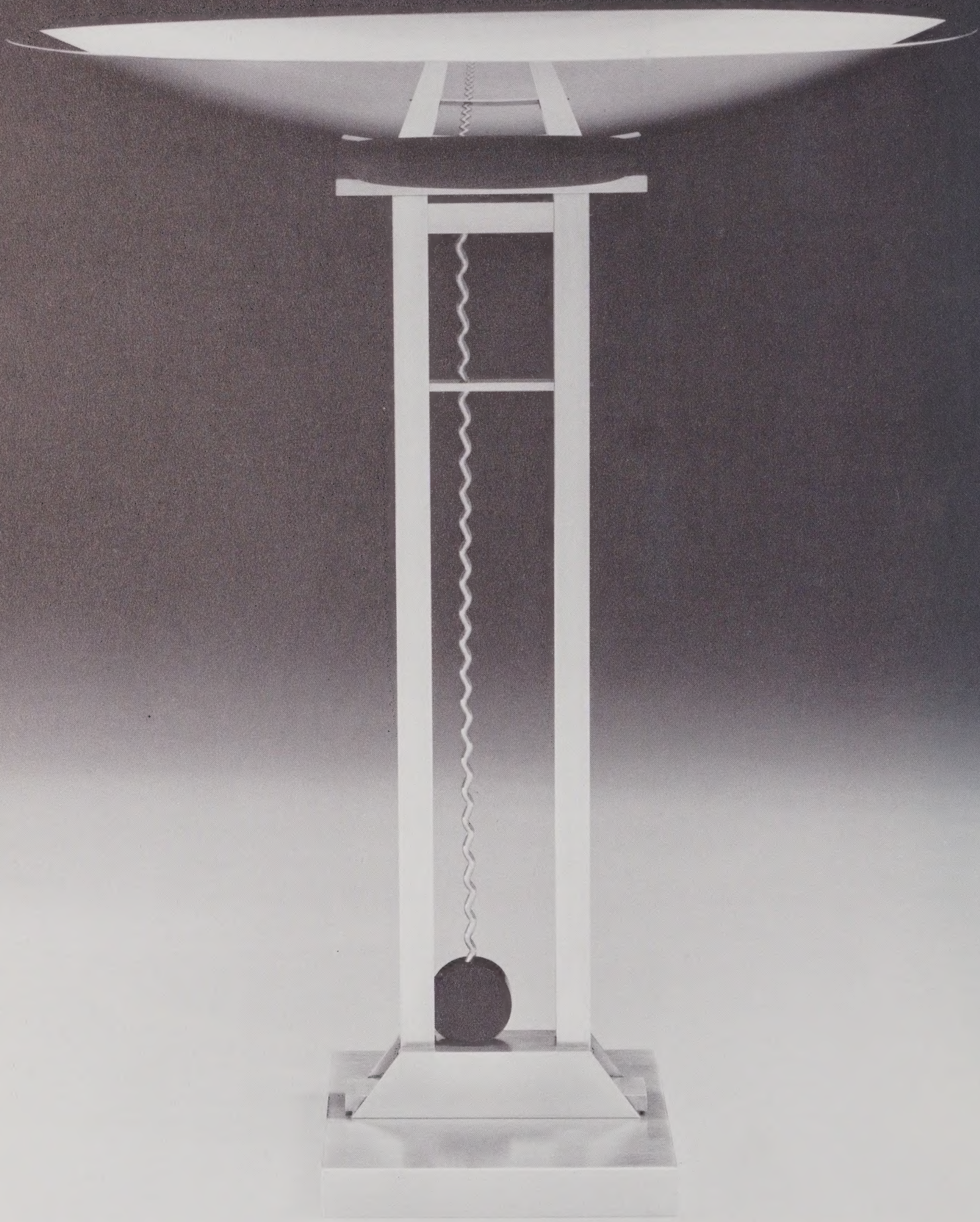


TIMOTHY GRANNIS

Essex Junction, Vermont
Designer: Timothy Grannis
Description of Jewlery Line: Classic art jewelry, with fluid, curved forms that reflect the designer's background and continuing practice in sculpture. The pieces are lightweight, comfortable, wearable. Highly polished, they bear little evidence of the handwork that has gone into their manufacture. Available in 14k gold or sterling, the line has been selling for nine years. A few designs are added each season. Because Grannis's design style is reductive, new work appears only after a long period of development; a production line, then, is what makes it profitable.
Business Setup: Apprehensive about training more people in the hand skills in his forming techniques, Grannis works with only one part-time assistant, whose background is in flute building. Pieces are sold wholesale with pricing formulas established by bench time, materials and materials markup. The line is shown at numerous craft fairs, including ACE shows and annual shows sponsored by the Smithsonian, as well as the WBAI Fair in New York City and the Philadelphia and Morristown craft shows.
Education: A studio art student in college, Grannis received little formal training in metalsmithing. A workshop with Heikki Seppä, however, was extremely influential in his use of shell-forming techniques.







SUSAN HAMLET
CULTURE OF MATERIALS

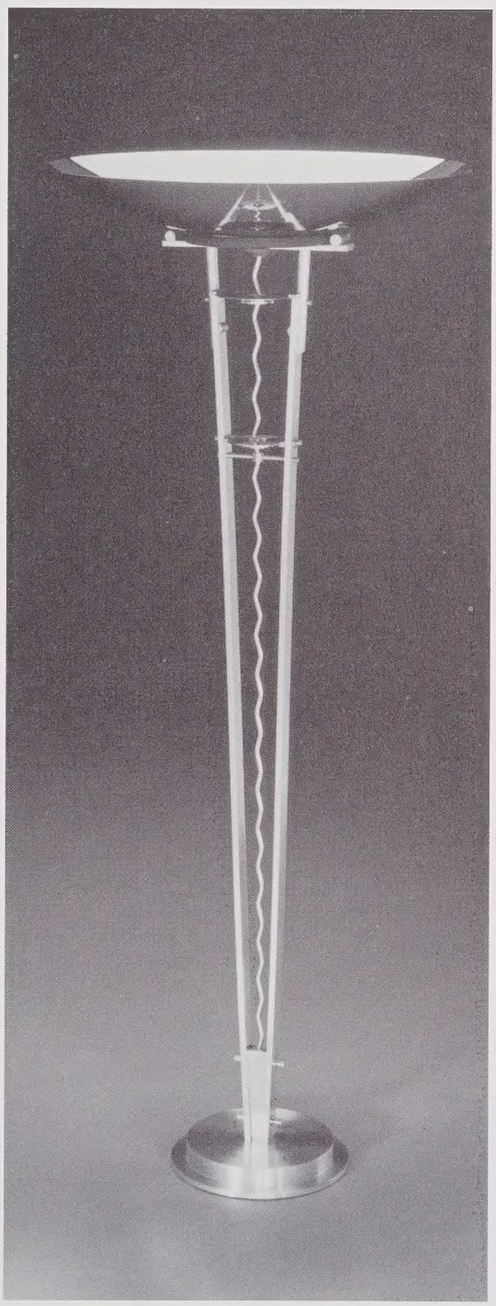
by Karl Bungerz

"Culture of materials," an expression originating from the early 20th-century teaching of Russian Constructivist Vladimir Tatlin, defines the artist's deliberate examination and selection of materials for use in the art-making process. This examination and application defines the form and concept being rendered. Today, Susan Hamlet could be seen to echo Tatlin with her own "culture of materials." Her ability to work both traditional and contemporary materials is important, as form, function and material become interdependent for the success of her pieces. Utilizing precious and base metals, as well as rubber, plastic, industrial hardware and readymades, she produces a substantial quantity of work in a variety of forms and functions: jewelry, wall reliefs, vessels and vessel forms.

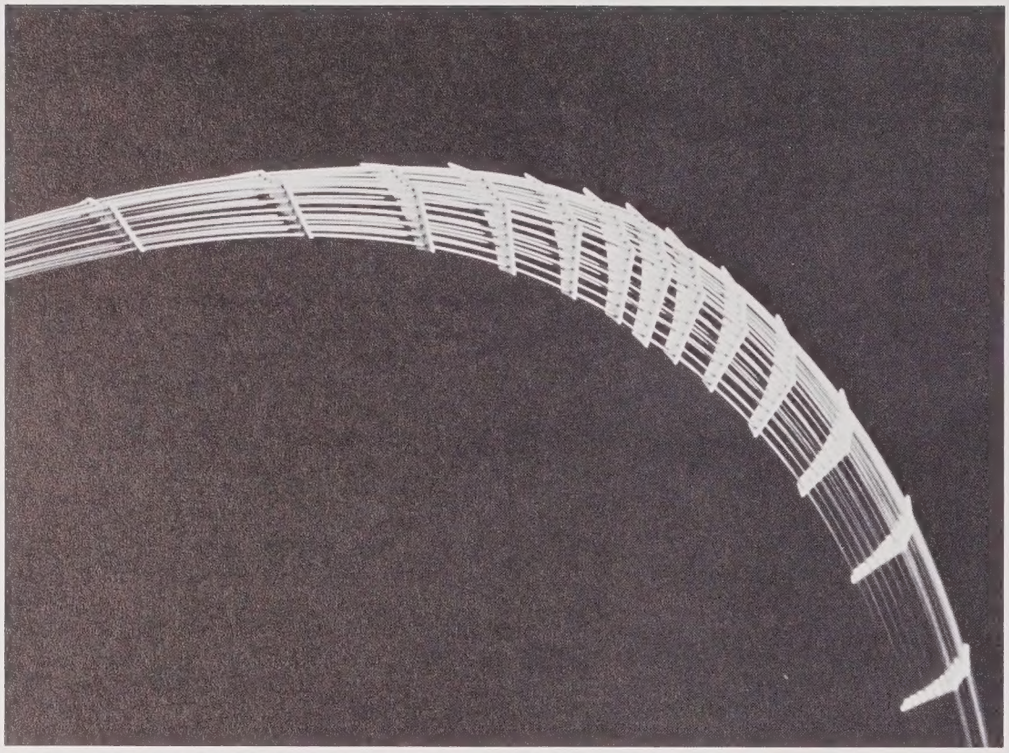
The jewelry, executed in thin-gauge wire and sheet of high tensile strength, is light weight and durable. Great effort is put into developing mechanisms for attachment and systems of construction that make use of the metal's flexible properties and at the same time define the piece's shape or form. Hamlet's early jewelry, called *Flexible Columns,* are neckpieces and bracelets constructed of springy, stainless steel wires that pass through a progression of ribs or spacers. Seen off the body, or in the uncoiled state, the piece is a long, resilient taper. The taper and cross-section are defined by the placement and diameter of the ribs. In as much as the wires pass through, but are not physically attached to each rib, the column can be curved and twisted and wrapped around neck or wrist. By inserting the small end into the large end the piece springs against itself, creating a secure closure. When released, the piece has a life of its own and returns to a taut, linear posture. The development of the flexible column system is a result of extensive calculation and experimentation. This system requires a predetermined diameter for each rib and predetermined distance from one rib to the next. A specific metal in a specific condition and configuration is necessary for such flawless functioning.

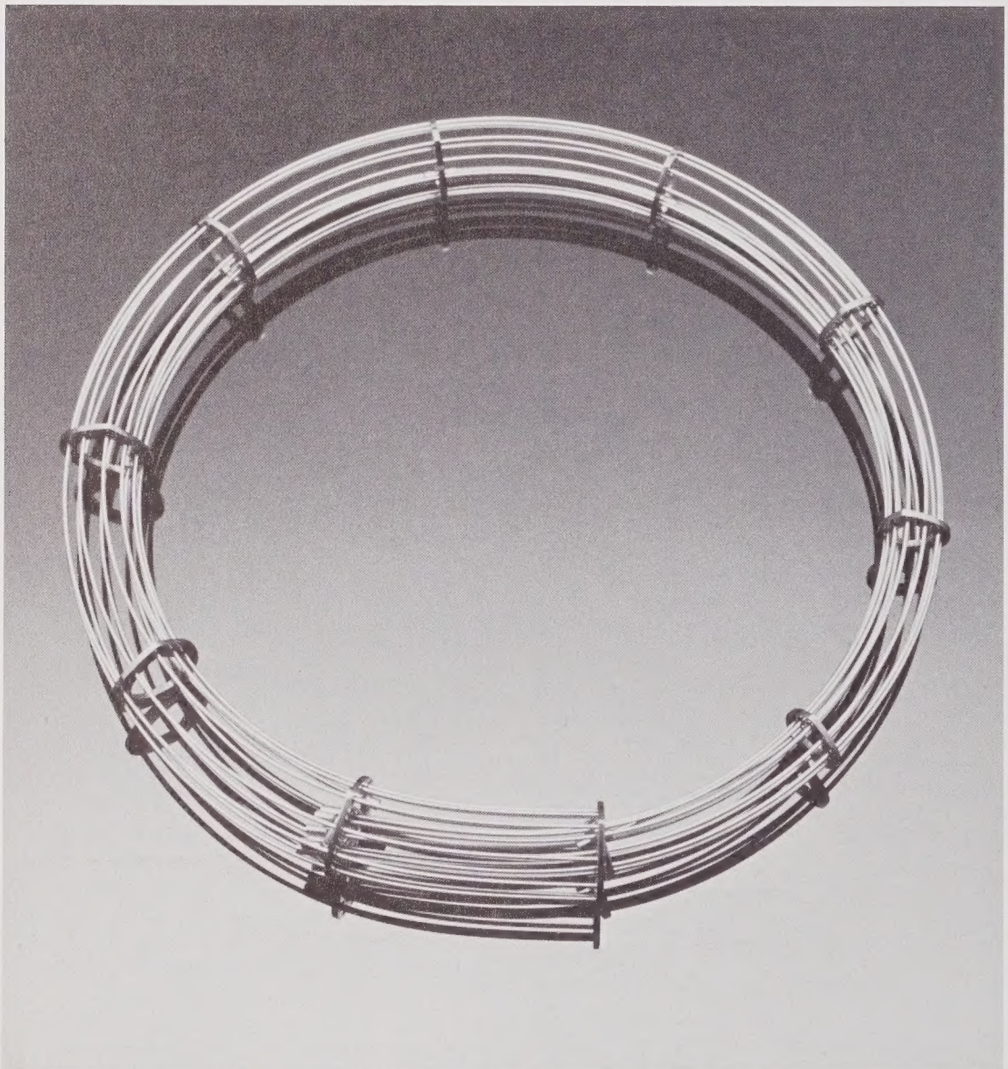
Hamlet's Shim Pins operate on mechanical principles similar to those of the *Flexible Columns:* construction and material properties simultaneously define form and mechanism. Sheet metal is the main component in these pieces, allowing the work to become planar. The pins are made of thin sheet metal called shim stock. In this case, stainless steel approximately .005 to .010 inches thick (a very springy material) may be deflected or torqued in and out of shape many times without losing its flexible quality. The shim is a simple and durable mechanism, cut to shape and arched, becoming both the body of the pin and the motor or activator of the mechanism. This arched shape is flanked by sterling and stainless bars that are compositional elements as well as levers which transmit the movement of the shim to the mechanism. When the arched shim is pressed flat, the levers separate the pin stem from its sheath, allowing the user to affix the piece to a garment. When the compressed shim is released, the pin stem enters its sheath and the pin is secure on the garment. The forms are essentially crescent or semicircular and bent to create the necessary arch. Edges of the arched crescent shapes are reinforced by the mechanism's levers. These billowy, smooth shapes, with their rigid perimeter, appear much like sails or fans capturing wind, defining movement. Their thin, light quality aids not only their use but also emphasizes the sail-like notion. Conceiving and developing systems of construction and attachment are of primary concern in the *Flexibe Columns* and *Shim Pins;* esthetics surrender to and are a result of these demands. Hamlet's investigative nature and understanding of metals and their utilization are rewarded by evidenced her successful manipulation of these systems and their perception as esthetically pleasing.

Reflectiveness in the metal surface is an effect exploited in Hamlet's series of *Shim Bracelets.* The bracelets are highly polished stainless steel channels or troughs curved around the wrist to form an open-ended circle. Within the trough are randomly placed elements: wires, tubes, colored plastic, mesh, all appearing to float and multiply in what the artist characterizes as a ". . . riot of movement." The random, whirling effect of this reflective interior has an illusionary and chaotic quality, eliciting a tense and anxious feeling. This chaotic sense becomes a metaphor of the often intense and frenetic schedule and activity of the artist. The edge of the metal trough is clad with black rubber piping. Compositionally, the rubber serves to define the edge of the reflective surfaces, and visually, it contains the active surface decorations. Practically, the rubber protects the wrist from the thin, sharp edge of the stainless steel shim when worn. The illusionary and chaotic effects serve another end. The bracelets become what one might perceive as a sensory device, a means to carry the piece beyond the static state. Much like a powerful painting or musical performance, more than canvas and pigment or notes and ledger, they elicit response, mood and emotion. This effect also relates to Hamlet's frequent reference to the "scientist, whose experiments (the static object) are only physical steps to yield greater finds in terms of enlightenment and theory (the sensory or emotional response)."



Opposite page: *Bowl Series 6,* hastelloy, brass, aluminum, stainless steel, plastic, rubber, 16 x 13½ x 13½", 1985; **right:** *Bowl Series 7,* hastelloy, aluminum, copper, stainless steel, rubber, 32 x 17 x 17", 1985

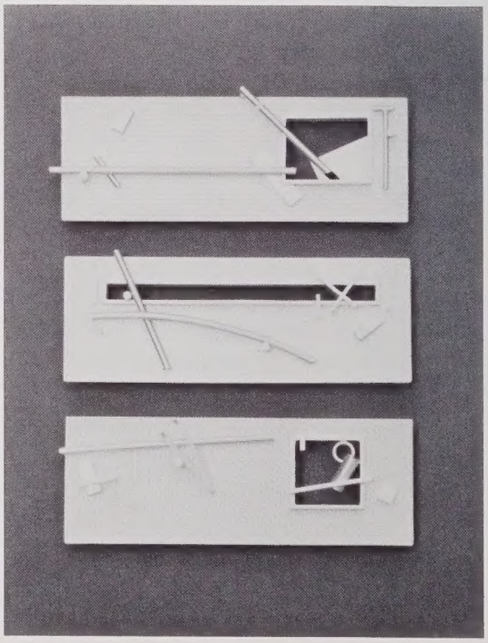




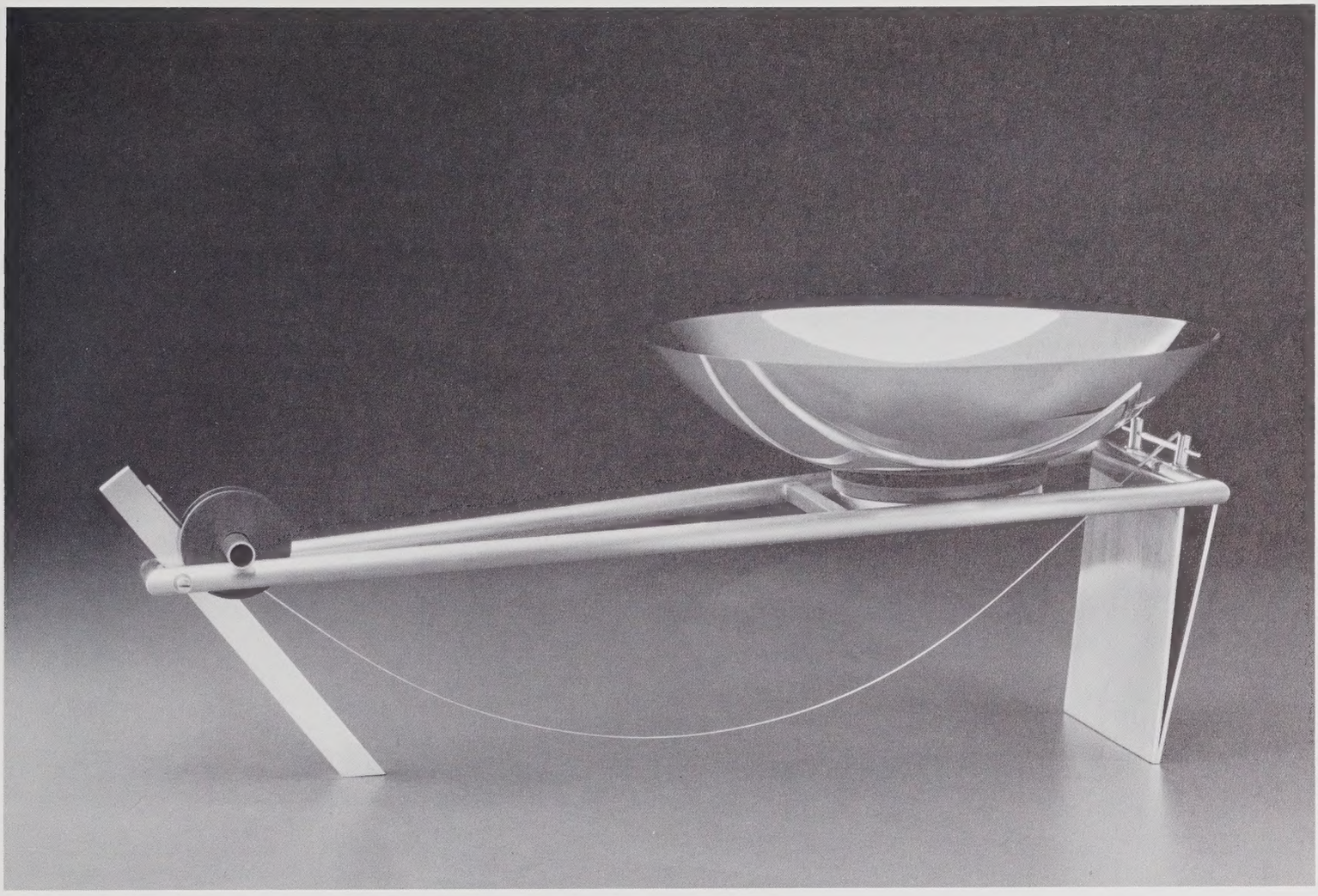
Another area of investigation is *Panel Studies,* small, triptych wall reliefs comprised of narrow rectangles of plastic or metal arranged on a larger field. Their surfaces are decorated with elements that might be described as mechanical hieroglyphics. The elements are made of wire, sheet, industrial mesh and shards of plastic and rubber. The characters are defined by the artist as both compositional and self-referential. The placement of the elements on the panels make compositions that read as conflict and resolve. The panels have areas that appear to be openings or small windows, an illusion to passageway or threshold. In some instances there is a cluster or congestion of elements trapped over an opening; others have elements floating freely within and through the passageway, further defining the idea of conflict and resolve. Compositionally, they are strong, but they seem to serve another end as well, as a therapeutic or cathartic act for their maker.

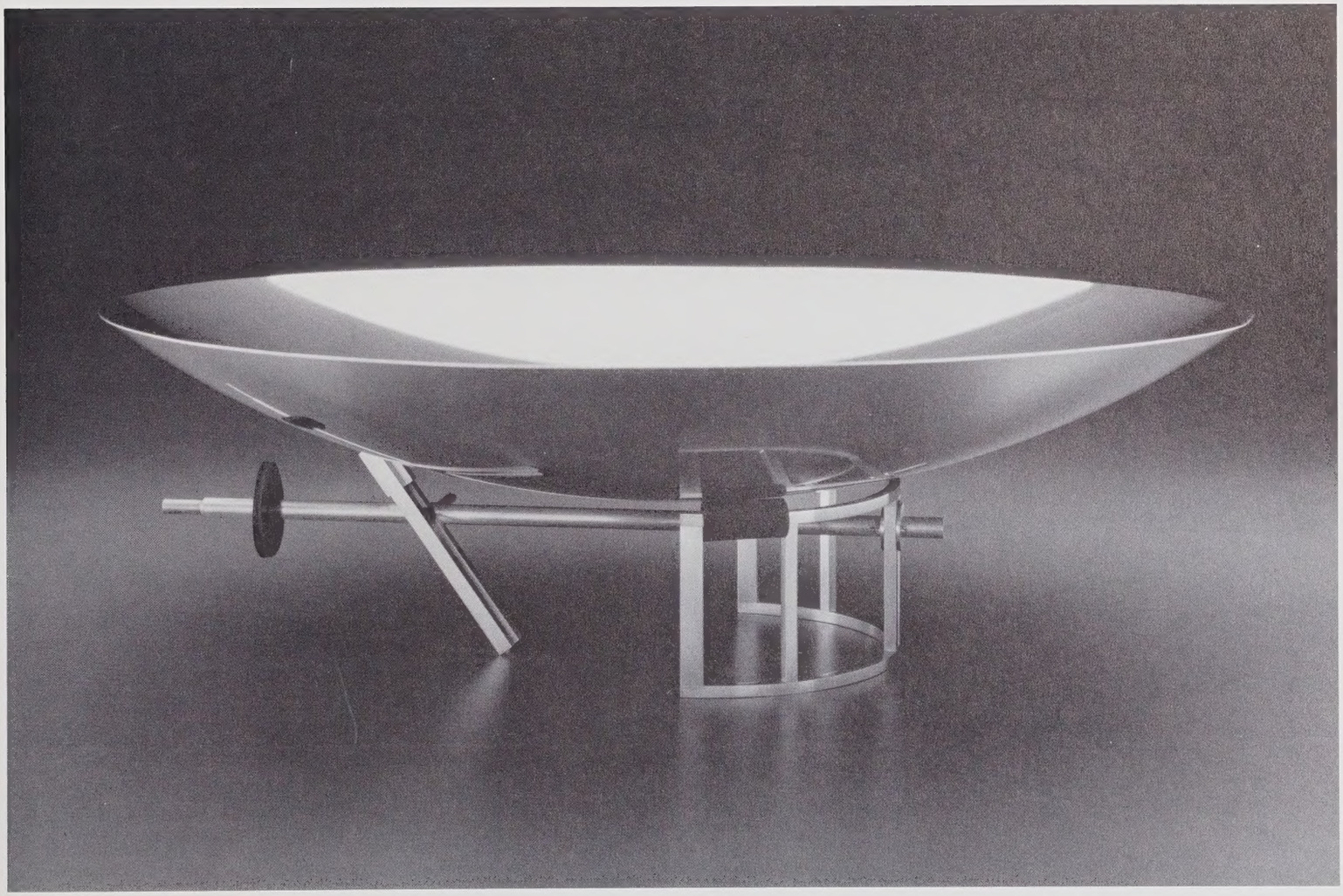
Hamlet has used the vessel or vessel reference in past and present work. *Holloware Constructions #2 and #3* have many of the visual and material characteristics of the *Shim Bracelets* applied to what appears to be a vessel form, an inverted cone, its peak removed, perched atop a stilted base. Bottomless containers or flaring openings—are they surfaces to be decorated? Although they amply impart the sense of illusion and chaos, the viewer is left curious as to why they resemble vessels.

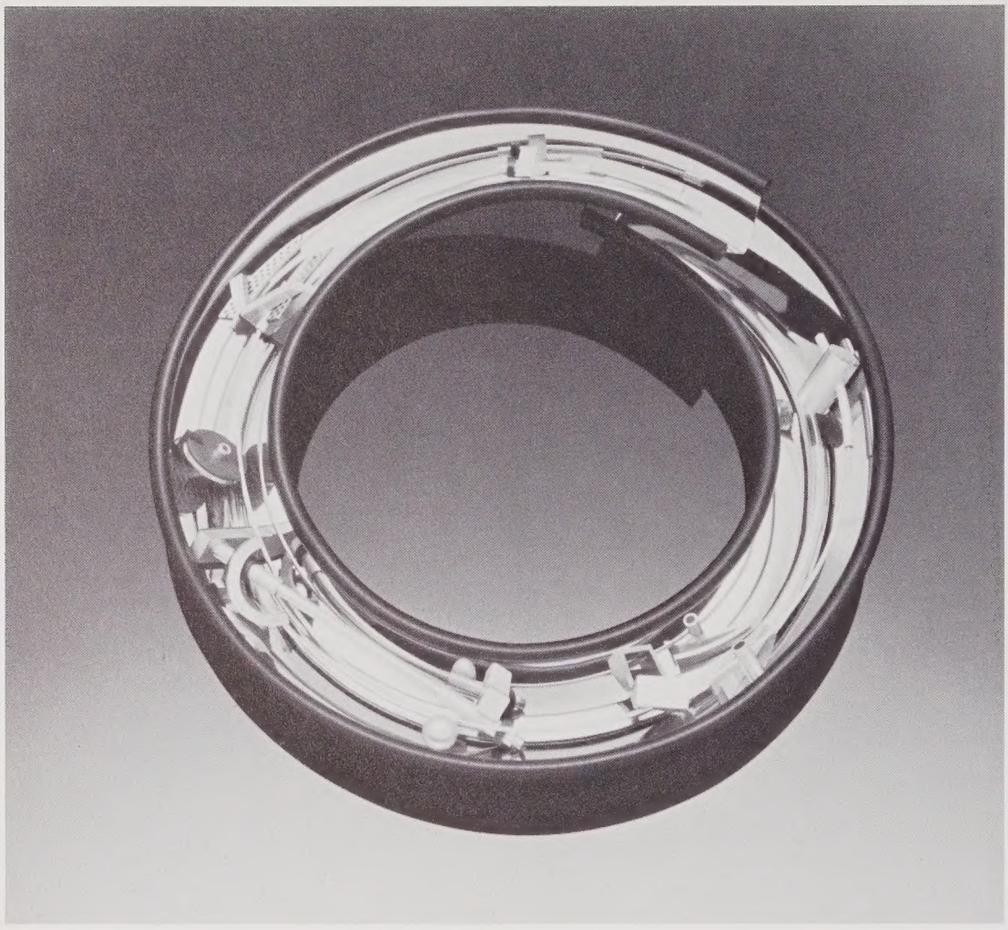
Where the viewer is left questioning the vessel reference in the *Holloware Constructions,* the new *Bowl Series 1–7* is bold and decisive. Unquestionably vessels (having bottoms), they can be used. The artist's intent is to use the vessel as art form and symbol, as well as to rekindle the public's interest in holloware. Visually, the forms have an austerity or minimal quality; some are accented with bits of decoration or details of manufacture. They are shallow bowls or dish shapes resting on bases, some vertical and uplifting, others low and horizontal. They are comparatively free of intense surface ornamentation. Their directness and clarity allow the viewer to focus (literally) on the pieces and read the broad, uninterrupted surfaces and structured bases.

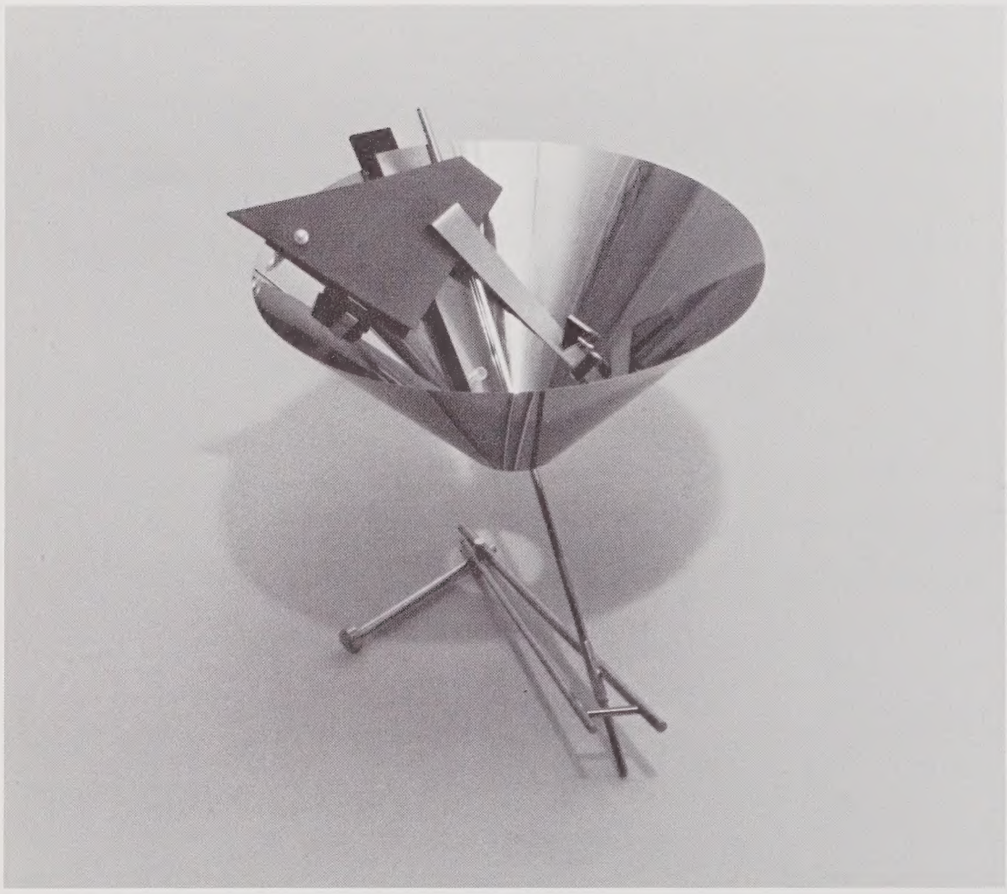


Top: *Flexible Column Study 6,* brass (tin-plated), stainless steel, 1¾ x ⅜ x 36″, 1978; **above**: *Column Bracelet 3,* 14k gold, stainless steel, 3 x 3 x ½″, 1983; **right**: *Panel Pins,* sterling silver, each 25 x 70 x 7 mm, 1983. Photo: Lonnie Meissinger; **opposite page, top**: *Bowl Series 3,* brass, stainless steel, rubber, 6¼ x 15½ x 8⅜″, 1984; **bottom**, *Bowl Series 5,* hastelloy, brass, copper, rubber, 6 x 17¼ x 17¼″, 1985









Top: *Shim Bracelet 8,* stainless steel, sterling silver, plastic, pearl, 3⅝ x 3⅝ x ½", 1984, Collection: Robert Pfannebecker; **above**: *Holloware Construction 2,* stainless steel, sterling silver, plastic, onyx, pearls, 1982; **opposite page**: *Bowl Series 1,* monel, brass (chrome-plated), stainless steel, nickel, plastic, rubber, 9½ x 6½ x 6½", 1984

Bowls 1 and 2 have a mechanical or structural quality. Tubes, rods and elements that seem to be extracted from industry or the laboratory rise up, holding and passing through the bowl. On the surface of both is a small pin of transparent, glowing red plastic. With their glowing red beacons and mechanical bases, they seem to be machines or apparatus in operation. These bowls might be a response to the petroleum industry concentrated in Hamlet's home state. *Bowls 6 and 7* have a tall, uplifting, spartan quality; their classical stance is reminiscent of oil lanterns from some ancient rite or olympiad. However, simultaneously, their sleek surfaces and contemporary materials indicate that they are products of our time. Both pieces have a squiggly, wavelike element running vertically from base to bowl. One piece has a pendant attached to the bottom of its wave element, much like the pendulum of a clock. The other's squiggly element rises up, intersecting and reflecting across the underside of the bowl and reads as a wave or frequency of sound or light. These simple signs of time and energy, the classical stance and contemporary material all build conceptually, making the pieces symbols of the eternal or universal, ancient and current, the vessel's presence in all cultures.

Hamlet's choice of materials serves to illustrate the previously described concerns. The bowl or dish-shaped elements are found objects, originally safety-valve membranes used in industrial plumbing and pressure systems. Made of the alloy Hastelloy (copper, nickel and chrome), they were retrieved from the scrapyard, refurbished and applied. They are ideal materials for her pieces, not only in terms of form, surface and ease of use, but also conceptually—as industrial elements they add credence to her scientific and industrial interest. Their highly polished, hard surfaces concentrate and reflect light. If one holds hand or face directly over the bowl the reflected light warms the skin by radiant heat. Physically, this supports the visual reference to energy. The bases are constructed of off-the-shelf rod and tubing. The bowls are not attached but simply rest on the base. This juncture is made by using a rubber doughnut shape between the base and bowl, a cushioned and frictioned fit. The use of standard stock and readymades and the ease of construction cleverly fulfill another end: the work can be sold at a reasonable price, enticing the audience to not only enjoy, but also to start to collect holloware.

Hamlet's palette and esthetic blend art, science and industry, promulgating the idea that these disciplines can benefit one another and that the activity of the scientist or inventor is much like that of the artist. While the scientist's experiments are only physical steps to a greater find, so Hamlet's calculated, almost scientific use of material, technique and design give us pieces which are not only esthetically pleasing, but also speak of the maker's relation to art and industry and, possibly, her art's place in time.

Susan Hamlet's work was exhibited at the Helen Drutt Gallery during May, 1985.

Karl Bungerz is an instructor in the metals program at Moore College of Art in Philadelphia, PA. He also maintains his own studio, making jewelry, furniture and containers, as well as consulting on product development for industry.

VINCENT FERRINI

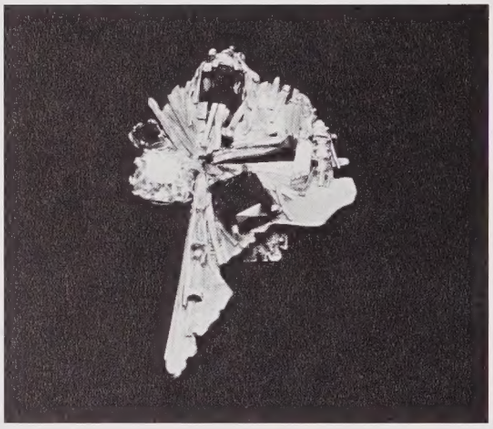
by Curtis LaFollette

On the second floor of a historic wooden building in an elegant shopping area of affluent Concord, Massachusetts, is found the studio/gallery of Goldsmiths 3. This environment reflects the mature stage in the logical progression that has melded a working-class ethic with the independent spirit of the post-World War II studio jeweler.

The founding partner of Goldsmiths 3 who embodies this spirit is Vincent Ferrini. Born in 1933 in Brockton, Massachusetts to a baker's family, Ferrini's pragmatic imperative came naturally. As a child, he spent solitary hours disciplining himself in the production of accurate model airplanes—not crass plastic toys, but painstakingly executed wood and stretched-tissue objects. Quiet and withdrawn, he spent countless hours in the forest near his home, observing the natural cycles of predation, death and regeneration. The innocent beauty of nature imprinted permanently on his information base and developed in him a reverence for life and its intangible structures as well as a permanent skepticism for technology. He was also deeply influenced by the baroque opulence of his grandmother's house, especially a lavishly decorated demitasse set. These informal, esthetic traditions were easily harmonized with his deep love for the forest, forming a predilection for rich surfaces and well-integrated forms.

In 1955, Ferrini graduated from the School of the Museum of Fine Arts in Boston with a BFA. The year 1955 was not auspicious to begin a career in the crafts. There were no established markets. Even the now ubiquitous crafts fairs did not begin to take shape until the mid 60s, and while the League of New Hampshire Craftsmen offered a systematic statewide sales network, it was only accessible to New Hampshire residents. So, in deference to the necessities of becoming a responsible citizen and earning a living, Ferrini enrolled at Tufts University and in 1956 received a BS in teacher education. He returned to Brockton and taught art in the public schools until 1963 when he became disillusioned with the mindless bureaucracy. In a courageous decision, he resigned his tenured position and became a student again.

He chose to study with Hans Christensen, whom he admired enormously, at RIT's School for American Craftsmen. Under Christensen's guidance he found it necessary to suppress his neobaroque tendencies and adopt a slick Danish veneer. Nevertheless, Ferrini was able to learn seaming and alternative raising methods, which broadened his technical base. Under Christensen he was also forced to examine his views about the nature of design and its relationship to personal observation and intuition. The prevailing system was more analytical and rational, stressing the elimination of extraneous detail and asserting the simplicity and the wisdom of the Danish style. The fact that these concepts were in conflict with his earlier training as well as his own convictions contributed greatly to the development of his mature style. Moreover, he now feels that although many avenues are open to him because of his technical abilities he will not explore them because of his working-class ethic. For example, he is unwilling to develop purely decorative objects that are unsalable or nonutilitarian.



By 1967, after a period of neoclassical experimentation, Ferrini found his baroque tendencies reasserting themselves. The delight he takes in rich textural surfaces, open lines and opulent materials is clearly evidenced by jewelry produced during the early 70s. Therefore, it is a complete surprise to witness Ferrini's stunning return to neoclassicism in his major work of 1975–76.

To understand this reversal, we must consider Ferrini's itinerary prior to and during those years. He spent 1974 in England, traveling throughout the British Isles. He was particularly drawn to Celtic design, finding in the artifacts of those ancient peoples kindred spirits. They, too, maintained a reverential disposition toward the power and mystery of nature so compelling to Ferrini as a child, and their use of dynamic geometry fascinated him. Incorporation of this spirit was evident in 1977 when he created a brooch entitled *After the Celts,* composed of silver, copperstone, agate and onyx, which expressed in simplicity and elegance those formal relationships that had only been hinted at in earlier extravagant textures.

In 1981, Ferrini was visiting artist for the Sydney College of Art in Australia. He traveled extensively and was overwhelmed by the strange, exquisite diversity of the flora and fauna. In 1982, he commenced a year-long series of jewelry reflecting the serenity, beauty and hostility of the multiplicity of life forms residing in an acrimonious cycle on the Great Barrier Reef. This body of work allowed him, for the first time, to deal directly with the wonder he felt as a child in the forest. As a mature artist, he possessed the resources necessary to bring many natural relationships, which had always been alluded to in his work, to the surface where they could be dealt with directly and powerfully. The full impact of this series cannot yet be assessed.

Ferrini's life work was well documented in a 30-year retrospective at the Brockton Art Museum in 1983. On this occasion, he wrote in the catalog of the show an insightful passage on the evolution of his work:

"When I look at the work, I am fascinated by my long-term involvement with certain identifiable lines, shapes and forms which appear in the very early years of the hands of the young artist, trying something out, sometimes tentatively, and then gaining the strength of conviction and experience in later repetitions. Sometimes a line or form disappears for years at a time and then reappears in a slightly different guise, juxtaposition, or scale. . . . Being in a position to review my work over a 30-year span affords me the opportunity to recognize its long-term, short-term and cyclical design characteristics. The technical quality of any one period varies somewhat in reaction to the character of the preceding period, but the design quality and character change more apparently. For example, the work from 1965 to 75 was extremely free both technically and in design, in sharp contrast to the work of the preceding decade. Along with many other artists, the freedom in my work of the 70s was the result of a generally freer, more experimental political, social and moral wave which swept the Western world at the time. Although I was never in the forefront of any such revolutionary movements by virtue of age (just a bit too old) and temperament (never a joiner), I was certainly affected by them, I feel, to my benefit.

Currently, the more conservative mood of the late 70s and early 80s is affecting my work, serving to reestablish my long-term interest in cleaner, more classical forms."*

Throughout his career, Ferrini has maintained a large and successful business, producing unique jewelry on commission. Most of the work in his retrospective had to be borrowed from clients. His business had, however, remained secondary to his teaching. He was an associate professor at Boston University, where he has taught in the department of art educa-

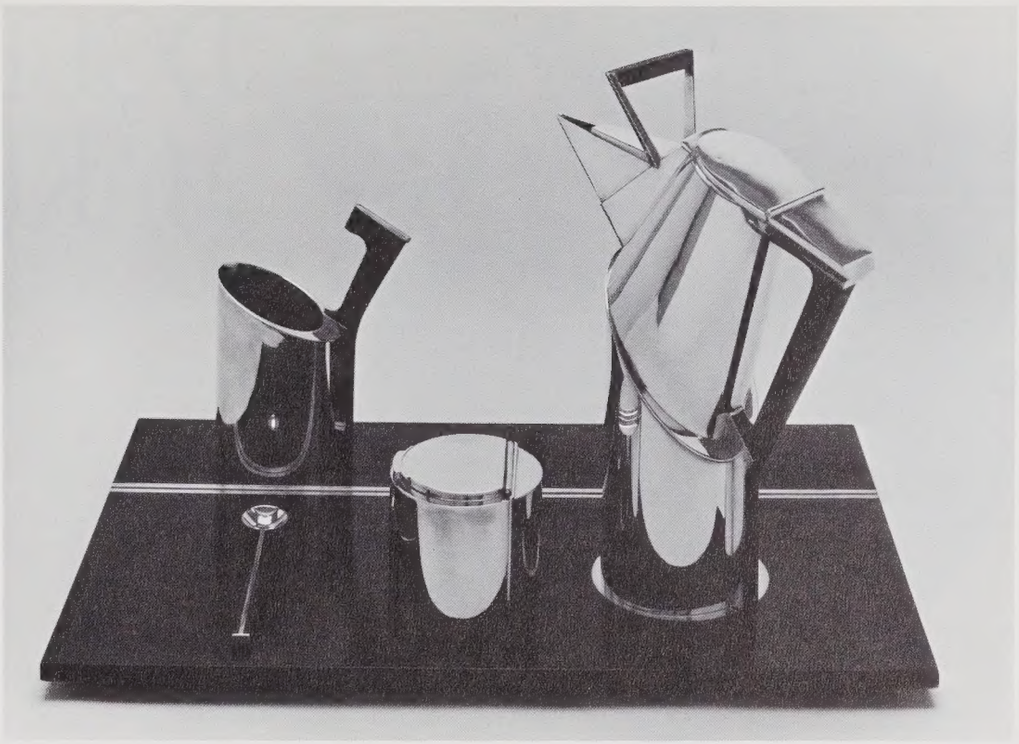
tion from 1964 to 1984. In consistently wishing to demonstrate the feasibility of alternatives to academic life, he, with partners John Reynolds and Bob Fairbanks, launched Goldsmiths 3 in 1983. The company has developed a rotating schedule to encourage each artist to exhibit independently and continue personal esthetic development. While the exigency of a young business precludes the utilization of optimum time blocks for experimentation, the venture is organized to allow each participant additional personal time as the business grows.

Another aspect of this operation that ensures continued personal development is the reliance on custom work. All of the work exhibited in the showroom is unique, and while it is for sale, its primary purpose is to acquaint potential clients with the level of quality and individual styles of the three. This atmosphere allows clients to establish individual relationships with one or all of the goldsmiths. Holloware is on display, but it is jewelry that supports the business. Ferrini attributes the difficulty in selling holloware to two major social conditions. First, there has been a great reduction in the purchase of ecclesiastical ware as churches have in general become more socially active and less ritualistic. In addition, the changes in patterns of family life as well as the substantial increase in theft have reduced the desirability of expensive tea and coffee services. There is also a tendency among those few people willing to invest in silver holloware to be focused esthetically on traditional reproductions rather than post-modern work. At present, they are selling only their own work. They hope, as the business develops, to be able to represent a limited number of other metalworkers.

In developing Goldsmiths 3, Ferrini has demonstrated that with proper research, site selection, and compatible coworkers, one can successfully produce high-quality jewelry and maintain a business without relying on teaching or the development of a production line to make ends meet.

***Ferrini, a Retrospective** catalog, Brockton Art Museum/Fuller Memorial, Oak Street, Brockton, MA 20401, pp. 9—10.*

Custis K. LaFollette specializes in holloware and mathematically based sculpture. He is a professor of art at Rhode Island College in Providence.



Opposite page: *Brooch,* 14k yellow gold, green tourmalines, 4.5 ct diamond, diamond baguets, 1967; **right, clockwise from top:** *Coffee Service,* sterling silver, ebony, 12-cup pot, 1975–76; *Eye of Horus* neckpiece, sterling silver, 14k yellow gold, opal, rock crystal on plexiglass, 1974; *Pitcher,* sterling silver and rosewood, 11″ h. and *Covered Compote,* sterling silver and walnut, 1964; *Tea Kettle,* sterling silver and bronze married metal, plexiglass and bronze handle, 1983, Brockton Art Museum collection

DOUBLÉE MAKING

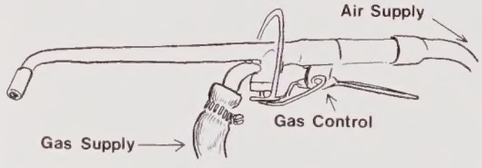
by Charles Lewton-Brain

Historically, a wide range of techniques has been used to clad or coat silver or base metals with gold. These processes are based on efforts to balance three factors: cost, physical properties and appearance. Rolled gold or gold-filled stock is a widely used commercial form of clad material.

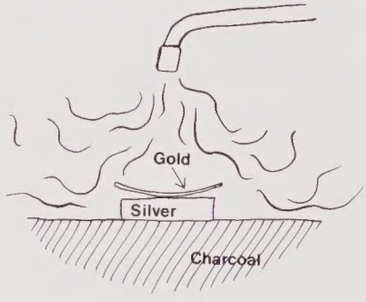
Doublée is a German word of French origin that is applied to rolled gold or gold-filled material. In this article the term will be used to differentiate between handmade and commercially produced sheet. Doublée is distinctly different than commercial material and can be produced in a wide range of thicknesses and alloys which may not be commercially available. Doublée is far less perfect and its size is limited by the workshop facilities available. Because of this freedom, numerous design options are available.

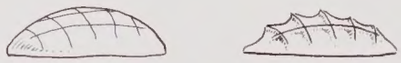
For a number of years I have been interested in gilding and gold overlay techniques. Prior to 1978 I made extensive use of fire gilding (mercury amalgam gilding) in my work. In 1979 I studied under Klaus Ullrich at the Fachhochschule für Gestaltung in Pforzheim, West Germany, an experience that sparked my interest in doublée making. During the 1960s Ullrich had made extensive use of 18-, 22- and 24-karat golds in his work, but as gold prices rose he began using doublée to maintain a pure gold appearance at a more reasonable cost. During a visit to his workshop I watched as he fused a 0.3mm 24-karat gold sheet to a 1.0mm sterling silver sheet. The material was heated with a large propane/air torch. Air was supplied by a foot bellows. The material was rolled to size. The shape of the sheet was controlled by directional rolling. The final rolling pass was done with paper imprinting to decrease surface gloss.

In the industry the fusing procedure is similar to the way in which mokume-gane is made. An example I saw in Pforzheim was a sheet of gold 10.0cm × 30.0cm × 1.0mm thick. The gold was scrupulously cleaned and placed over an equally clean slab of sterling, 10.0cm × 30.0cm × 10.0cm thick. The gold alloy most often used is 14-karat with slightly more silver than copper. Two steel plates (10.0cm × 30.0cm × 2.0cm thick) were placed over and under the gold and silver. The stack was wrapped in brass foil to exclude oxygen. It was put in a gas kiln (a controllable atmosphere, probably reducing) for six or more hours until it reached the correct temperature. It was taken out and placed under a drop press for bonding. The bonded slab was unwrapped and rolled out or stamped into various forms.



Mouth-type blowpipe

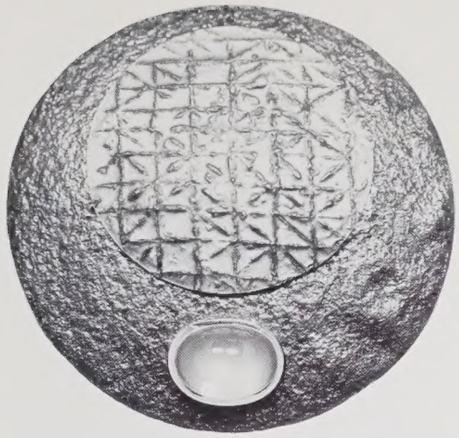


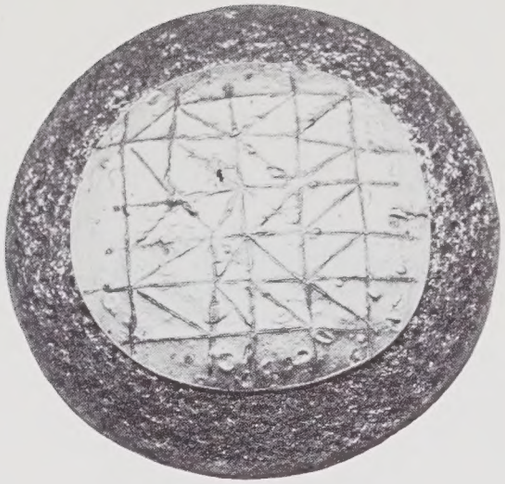


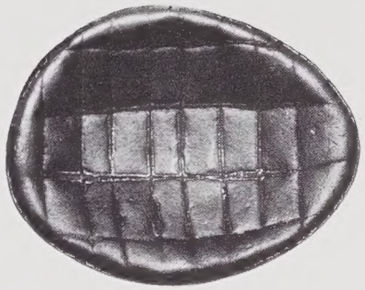
Domed

Re-fused/Slumped

In 1980 I returned to Canada and established my own workshop. I began to experiment with fused metals to obtain the color of 24-karat gold and the strength of sterling at a reasonable cost. The first problem I encountered was the selection of a suitable torch. My first experiments indicated that acetylene was too hot and propane/air was too oxidizing. Eventually I settled on a mouth-type blowpipe and propane gas. This provided excellent control, and by combining this torch with a charcoal soldering block, a reducing atmosphere could be maintained. The blowpipe I use costs about $15.00 and is available from several European tool companies (see *Suppliers*). I sawed off the tip from a Bernz-O-Matic-type, small propane torch kit and clamped a rubber hose to the brass tube that was left to supply the blowpipe with gas. The air is blown into a second tube. The most difficult part of using a blowpipe is that the flow of air must never stop. This means that, like a horn player, one must breathe in while a reservoir of air held in the cheek supplies the torch. This is replenished as one breathes in and so the flame is never interrupted. Facility with this is best accomplished by practicing with one of the old-fashioned smaller blowpipes used with an alcohol lamp. The amount of heat produced is directly related to the air







Opposite page: *Brooch,* sterling silver, 24KD aluminum, brass, 3.5 cm d.; **above**: *Brooch (Artic pin* series), sterling silver, 24KD, steel, moonstone, 6.5 cm d.; **right**: *Brooch,* sterling silver, 24KD, re-fused to create relief, 4.5 x 7 cm; **far right**: *Brooch,* sterling silver, 24KD, steel, re-fused to create relief, 7 cm d. All work is by the author.

supply so the process is very direct and controlled. It can be done slowly enough to ensure that the metals bond without simply alloying. Alternatively, one can use bellows or learn to work with a sharper, hotter flame. A natural gas/air torch would work quite well.

Materials also have a strong influence on the system. While various gold alloys may be used, 24-karat gold offers the best probability of success. Its melting point is so far above that of sterling that it does not alloy easily. When alloying takes place during fusing, it is usually on the surface of the gold sheet and can be scraped or sanded off to restore a gold surface. Due to the extreme softness of 24-karat gold, however, the doublée is readily liable to damage. Even a fingernail can scratch a rolled-paper finish. Therefore, a 24-karat doublée surface should be protected from abrasion by surrounding walls and by function. Unsuitable for rings or bracelets, it is best for pins, earrings and small sculpture. Burnishing the surface effectively prevents further damage. Of course, a hard gold alloy may be used for the doublée material in order to create a harder surface.

The gold may be fused to fine silver or sterling. Sterling works well, but oxidation may present a problem that does not occur with fine silver. Conversely, fine silver is too soft for any load-bearing part of a construction. Gold may also be fused to copper, but this is extremely difficult because the copper-gold alloy formed melts at a relatively low temperature and spreads very rapidly through the gold. It is possible to use this effect with copper to create areas of varying alloy content (rose gold to red gold) on the copper surface and then bring out their colors by suitable chemical treatment.

My first efforts used 0.3mm gold sheet fused to 1.0mm sterling sheet. Fusion was conducted using a soldering flux. With more experience, I began using 0.1mm gold sheet and 1.5 to 2.0mm silver. These later experiments were done without flux, relying on the reducing atmosphere of the torch and charcoal block. At first the process was treated as a way to obtain a plain gold surface. It soon became apparent that it would be possible to engrave through the surface to expose the silver and develop graphic patterns. Patterns could be engraved in the surface before rolling. Line width could be manipulated by rolling. Line width, texture and relief can also be modified by re-fusing. One may thus use the metal as one uses drawing media and paper.

The following details the doublée process on a studio scale:

1. Roll the gold to a thickness in the range of 0.3mm to 0.1mm on clean rollers. Anneal the gold when it shows signs of curling and increase the pressure in small increments to avoid rippling of the sheet. Keep it as flat as possible. If it is not completely flat, leave it curved rather than damage the smooth rolled surface by hammering. Hammer marks may cause air to be trapped in the texture while fusing. If necessary the sheet can be flattened hot while fusing.

2. The silver used should be at least 1.0mm thick. Thicker silver will give greater surface area of gold at any given finished thickness. The thinner the layer of gold, the greater the degree to which the silver alloy approaches its surface. With very thin layers the gold becomes paler and greenish. A thickness of less than 0.1mm gold may cause alloying through while fusing or loss of color intensity on the final piece. With very thin gold layers, oxidation can take place leading to a spotty or speckled effect after rolling.

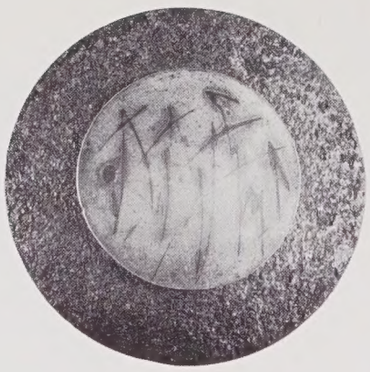
3. The silver is cut to the required blank shape for fusing. Rounded or oval shapes are best for rolling without stress. The final material may be cut to any shape and soldered into fabrications. If you are working with freeform shapes with re-entrant angles, tearing of the blank is almost certain to occur while rolling unless great care is taken.

4. The silver blank is placed on the gold sheet and the gold cut out around it, leaving the gold about 1.5 – 2.0mm larger than the silver. This prevents any silver alloy formed from crawling onto the top surface of the gold sheet.

5. Both gold and silver are now cleaned on their contact surfaces. A medium or fine emery wheel on a flexible shaft works well. The thicker silver sheet may be cleaned by scraping, but the gold sheet will tend to curl up. Place the cleaned surfaces together, but do not touch them with your fingers.

6. There are two ways to proceed. You may fuse the sheets together "freehand" or fix the sheets in position and then fuse them together. To align the sheets, take a piece of leather or folded paper towel and put the gold side down on the leather. Pass the material through a rolling mill with light pressure. This forces the gold to form itself around the sides of the silver blank and fixes it in position. It also prevents the gold from sliding off when fusing and ensures good contact between the gold and silver sheets. It also tends to prevent oxidation of the contact surfaces. There are potential problems with this second procedure. It may cause air to be trapped under the gold sheet if the sides fuse first. More importantly, you cannot see the temperature or surface texture of the silver as it heats. This conceals the "flash" of silver alloy that seals the gold to the silver. Overheating will cause the silver alloy to come through the gold sheet. Until you have considerable practice, it is easier and more controllable to fuse the flat gold to the silver and not to bother forming the gold over it.

7. Fusing is done on a flat charcoal block with at least 2.0mm of charcoal on each side of the blank. As the charcoal burns it uses up oxygen and helps maintain a reducing atmosphere. The gold sheet is placed on the silver (clean sides in con-



Far left: *Brooch,* sterling silver, 24KD, 6 x 6.5 cm; **left:** *Brooch,* sterling silver, 24KD, steel, 7.5 cm d.; **above:** *Brooch,* sterling silver, 24KD, aluminum, 6.5 cm d.

tact). A very soft, gas-rich flame is used, which envelopes the metal and charcoal. This flame is maintained and the temperature is slowly raised until the silver begins to near its melting point. If one is using gold pressed over silver, care must be exercised at this point as the silver surface is mostly hidden from view and the silver alloy may unexpectedly appear through the gold. If you have placed the gold sheet on the silver it may be advantageous to have it domed slightly so that the centers of the sheets contact each other. If a reducing atmosphere has been maintained, the centers fuse first and the fused area moves outwards to the edges. This technique helps eliminate air bubbles trapped under the gold. The moment that fusing has taken place, heating should stop.

8. The doublée slug is quenched and checked for gaps at the edges. If any exist, it may be re-fused to seal them. If bubbles show on the gold, they may be burnished down with a fingernail. If larger areas have not fused or there are large bubbles, they must be pricked through with a fine point, flattened and re-fused to the point that silver alloy is noticed at the prick mark.

9. Excess gold is cut off the slug and saved. The sides are filed smooth and sanded. Any indentations may become the origin of a crack while rolling. Because of the high temperature of the process, the silver grain structure is enlarged and every care must be taken to avoid damage to the sheet during rolling. After filing and sanding, the back edge is also beveled slightly to help avoid cracking.

10. The slug may then be rolled directly, if a plain gold surface is desired.

11. Alternately, mount the slug on a pitch stick or engraver's ball for engraving, drilling, etc. Silver filings may also be fused to the gold surface for a dusted effect.

12. At this point the slug is engraved. Lines will widen in the directions in which most rolling takes place and this should be planned for. A fine-pointed center punch, which pricks the gold surface, will produce dots of silver on the final piece. On thinner gold, heavily scribed lines will show up later.

13. The slug is removed from the pitch, cleaned and rolled. When rolling, increase the pressure in *small* increments and maintain the shape of the piece by changing the direction of rolling. At every pass the edges should be examined for cracks. If even a tiny crack appears, it should be filed back just past the origin of the crack and the metal annealed. If a larger crack occurs, it can be hard soldered. This will show on the gold front as a line. The sheet should be annealed about every three passes through the mill. It is better to be too careful than to lose a sheet to cracks. If you hear it "tinkling", then it definitely needs annealing.

14. When the sheet is the correct thickness (I typically use 0.5mm), you can print the surface with a texture such as cloth, papers of different types and so on. You may also leave it shiny from the rolling mill and burnish the surface to protect against damage.

15. The material may be cut up and soldered into constructions.

16. At this point (or earlier) you can widen lines or cause them to bubble by careful refusing. This provides the possibility for further esthetic choices. If the doublée sheet is domed and then brought near the fusing point, the gold-covered areas will sag, leaving the silver lines as raised relief areas. This can provide agreeable height variations in the work, as the relief can be quite high. Careful re-fusing of thin gold will bring some silver through the gold, allowing for the development of reds and oranges when oxidizing the doublée surface.

17. The finished piece may be colored with liver of sulfur and ammonia. Begin by pouring some ammonia into a small container (household clear ammonia is best) and paint the ammonia on the metal. Keep the metal surface moist. A *tiny* amount of weak liver of sulfur solution is introduced to the ammonia and this is painted on the same way. The color develops slowly, first oranges, reds and so on. If the color is unsatisfactory, anneal, pickle and start over. It is also possible to heat the doublée surface until the oxidation begins to disappear and then plunge it into liver of sulfur solution which can produce a "solarized" look on the areas around the exposed silver. Exposed silver areas will turn black, as is usual with liver of sulfur. The surfaces could be waxed slightly or otherwise sealed. I leave my surfaces unsealed. There does not seem to be much of a problem with color fading. One silver piece I have oxidized yellow/purple/red is still unchanged after eight years without protection. This could vary with the surrounding atmosphere. As a final touch lines may be emphasized on a paper rolled finish by lightly burnishing them.

The doublée process is one of several types of fusion that can be applied to numerous combinations of materials. It provides a method to produce a wide range of surface colors and textures in a reasonably controlled manner. It should be applicable to a wide range of forms, scale and design.

Suppliers

Karl Fischer, Postfach 567, D-7530 Pforzheim, W. Germany (catalog in English with prices)

J. Schmalz, Museumstrasse 4, D-7530 Pforzheim, W. Germany (catalog in German without prices)

Charles Lewton-Brain is an MFA candidate at SUNY, New Paltz, after having owned his own business and taught in Canada for several years.

REVIEWS

Masterworks of Contemporary American Jewelry: Sources and Concepts
Victoria and Albert Museum,
London, England
May–July, 1985
by Deborah Norton

The press release for "Masterworks of Contemporary American Jewelry: Sources and Concepts" announced that the Victoria and Albert Museum would host "The first comprehensive exhibition in a major British museum to survey the development of jewelry by American artists." The show was organized, not by the V&A, but by the Barbara Rockefeller Jewelry Associates, which the press release described as a "New York firm dedicated to the promotion and sale of the finest jewelry created by contemporary artists." One might have hoped that an exhibition of this importance could have been organized by someone dedicated to craft history and scholarship. It was to be a part of London's American Festival, held in response to last year's British Festival in New York City. This sounded like a rare opportunity to see some very important historical pieces in a setting where one could gain insight into the origins and growth of the American studio jewelry movement. But I must admit I was somewhat skeptical about the whole thing, as experience has taught me that, unfortunately, when such grandiose claims are made, it is often the press release, not the actual work displayed, that is the most impressive element in the exhibition.

This exhibition was held in the museum's jewelry galleries, in the cases usually reserved for changing one-person exhibitions of contemporary work. These cases are located in the midst of the permanent jewelry collection, containing masterpieces from ancient to contemporary times. It is a rare occasion when any temporary exhibit can compete with the V&A's outstanding collection, but I had hoped that the stature of these American masterworks would enable them to at least hold their own. Unfortunately, due to several factors, this was not the case.

The primary problem was that the scope of this show was too broad to cover in the meager space allotted to it. Perhaps if it had been limited by years, maybe to "Masterworks from 1945–60"; or by media, "Masterworks in Enamel," it might have worked. But to try to cover the entire spectrum of the American studio jewelry movement, from its inception to current work, with only 43 pieces by 19 artists, is attempting the impossible.

Given such adverse conditions, it should have been obvious to the organizers, Barbara Rockefeller, Abbie Gonick and Toni Lesser Wolf, that their choice of artists and pieces would be crucial if this exhibit was to be at all successful. However, although some truly fine examples of various phases of American jewelry were included, some of the choices seemed quite poor. It may be significant that the 48-page color catalog says who "organized" the exhibit but does not mention that anyone "curated" it.

The exhibit opens strongly with one of Alexander Calder's remarkable neckpieces from 1945, a piece that was extremely innovative at the time it was created and is still alive with motion and personal expression today. However, the inclusion of three pieces by Louise Nevelson, a ring and brooch from 1968 and a pendant from 1976, struck this viewer as highly questionable. Although I am a great admirer of Nevelson's sculpture, her constructed wood jewelry seemed clumsy, lacking sensitivity to what jewelry is all about. I can certainly think of more exciting and influential work done by others in that time period. And one can hardly say that Nevelson has been an important influence on other jewelers. I also question the inclusion of John Marshall, who is deservedly renown for his holloware. Although the two pieces of his jewelry that were in this show are quite nice, one cannot credit him with having nearly the impact in the field of jewelry that he has had in holloware.

Stanley Lechtzin and Svetozar Radakovich were included in the show, as indeed they should be, for both pioneered jewelry techniques that have influenced countless others. However, they are each represented by only a single piece and neither piece is an example of their early, most innovative work. Lechtzin's *Torque #70E* from 1983 uses the electroforming technique that he is so well known for. But how much more interesting it would have been if one of his pieces from the late 60s, when this technique was fresh and daring, had been included. Likewise, Radakovich, one of the first art jewelers to experiment with centrifugal casting in the 50s, is disappointingly represented by a constructed bracelet from 1975.

Among the highlights of the show were the four talismanlike enamels of William Harper, appropriately typical of the work he is known for. The three rings by Margaret De Patta, done in 1939, 48 and 55, seemed so contemporary it was hard to believe they were done decades ago. Her explorations of reflected and refracted light through the use of unusually cut stones in unique settings have yet to be equalled or carried further by anyone in recent times. And Jamie Bennett's 1985 *Proteus Series* brooches added new dimensions to his ongoing studies of semiabstract imagery in opaque enamels. His three anthropomorphized pins present many of the same conceptual ideas as in his previous pieces but in a fresh, more playful way.

The fact that eight of the artists (Mary Lee Hu, Richard Mawdsley, Margret Craver, John Paul Miller and Art Smith, as well as Lechtzin and Radakovich) were represented by only one piece did nothing to enhance their reputations or to make a strong case for why they should have been included in the exhibition. There should be an international law that group exhibitions must include at least three pieces from each artist.

Unfortunately, there were very few pieces from the late 60s and none representative of the strong artistic and political statements that were being made at that time. It is hard to understand how this most exciting period of American jewelry could have been overlooked.

Others in the show included Deborah Aguado, Colette, Robert Ebendorf, Philip Fike, Harry Bertoia and Earl Pardon.

In an effort to understand how and why this exhibition took place, I called Richard Edgcumbe, Assistant Keeper of Metalwork at the V&A. He explained that the V&A had wanted to participate in the American Festival, especially the metals department, which felt it had not shown enough American jewelry, but there was no money in the budget. Therefore, when Barbara Rockefeller Associates offered to do this show at no cost to the museum, the offer was quickly accepted. Although he was not altogether pleased with the results, he was quick to point out that it was not "just a rich woman's fantasy" and that it did "give an impression of what was going on." I guess the old adage still holds true: you get what you pay for.

—Deborah Norton

"Masterworks of Contemporary Jewelry; Sources and Concepts" was exhibited at the Victoria and Albert Museum, London, from May 11–June 27, 1985. The 48-page catalog with essays by Oppi Untracht and Toni Lesser Wolf, 13 color and 14 black-and-white illustrations, is available for $14 prepaid (New York State residents add appropriate tax) from Barbara Rockefeller Associates, 1080 Fifth Avenue, New York, NY 10128.

Contemporary Metals USA
Downey Museum of Art, Downey, CA
May 9–June 21, 1985
by Carolyn Novin

Contemporary metal artists, liberated from restrictive parameters of beauty and function, are moving from a primary concern for method and material to a focus on idea and content. Whether the point of view emanates from personal vision, analytical interest or desire to make a universal statement, a basic individuality underscores the diversity of current work in metals. This assertive spirit energized and unified "Contemporary Metals USA," a competitive exhibition of 156 works by 129 artists from 33 states. Lynda Watson-Abbott, the sole juror, selected technically excellent sculpture, holloware and jewelry for this survey, which also included invited artists Jamie Bennett, Arline Fisch, Gary Griffin, John Marshall, Eleanor Moty and Kay Yee. Works representing their distinctive styles were not isolated in a separate niche but placed alongside their contemporaries in a successful departure from convention, which strengthened the show's impact.

Effectively mounted on the wall opposite the museum entrance, David Luck's *Dream's Curtain* in brass, copper and nickel silver was a striking introduction to the exhibition. A multitude of small squares hang from a semicircular panel; each is pierced, domed, patterned and made unique in a variety of ways. Then, all are linked into a rectangular tapestry of rich tactile and visual power that pulled the viewer into a private world of light and shadow.

Heather Marcus stimulates analytical interest in light and shadow with *Black Slash,* a wall-mounted construction of acrylic and gesso over steel. A dramatic black ledge transects rectilinear panels and juts towards the viewer. As cast shadows change in response to variations in light, they extend and modify the physical boundaries of the brightly colored piece.

In contrast, color unifies Claire Sanford's graceful sculpture. A flaring vessel narrows to balance atop a tapering, wire-topped pedestal. The subtle interplay of delicate aqua, pink and ivory tones on these two forms joins them into one powerful whole, which generates a ritualistic and mysterious aura.

William Baran-Mickle's *Pacific Movement* of brass, copper, nickel and sterling silvers, further exemplified the frequent use of the vessel as a sculptural idea rather than as a functional object. Textured layers with irregular edges seem to ripple as they build the ovoid from which linear elements arch and thrust in an intriguing counterpoint to the work's solidity and title.

Symmetrical assembly of highly refined components describes John D. Wittersheim's steel and aluminum *Vessel #96,* in which three triangular legs round and taper as they impale a dark, gleaming spheroid rimmed by a wide collar. The machined perfection of line and surface emphasizes the dramatic confrontation of downward momentum and aggressive uplift. This use of industrial technology either as a basis for design or as a source of parts, or both, was a feature of other works in the exhibition. Of note were Karl Matson's *Free Fall,* Roger Snyder's *Weathervane #2,* Lotte Cherin's *Spirit Catcher* and David Tisdale's brooch.

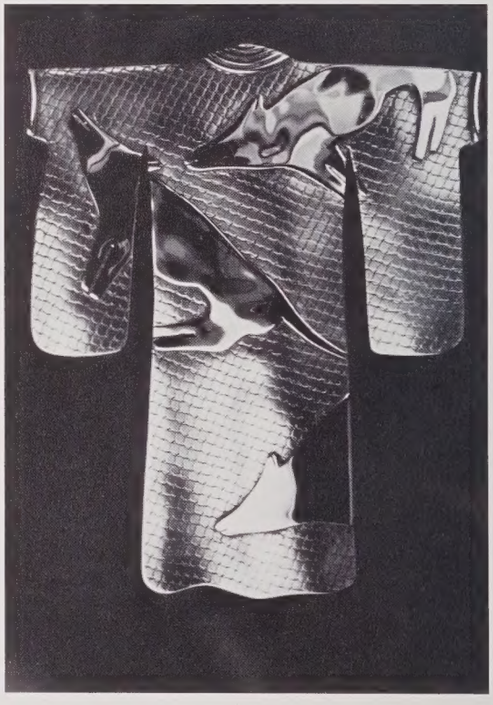
Smaller sculpture and holloware, along with jewelry, were put into display cases in one room; severe overcrowding was a problem. These pieces demand and deserve enough space to be appreciated individually. Careful viewing was required, and rewarded, because these smaller objects reflected the same expressive energy, visual impact and skillful use of materials shown by the larger scale works. For example, Clara Arana's sophisticated wall piece *Composition #11* of titanium, tantalum, sterling and nickel silvers, is enlivened by the dynamic interaction of basic design elements. Two independent but related squares are constructed of thin metal layers patterned and colored, then rolled back to release shining tendrils that probe and push beyond the perimeter. A froth of texture at one corner of each square gives balance and contrast. Not the only example of anodized refractory metal coloration in the show, this work avoids cliché by subtle use of the popular technique.

Other artists combined different metals for effect in jewelry and holloware. Catherine Sanders produced three particularly refined fibulae of contrasting stripes of laminated copper and kuromido within a triangular design theme enlarged by linear extensions and shifted planes. Deborah Krupenia's *Liqueur Cup II* is a kaleidoscopic sampler of minute patterning and color in silver, 22k gold, shakudo, shibuichi, kuromido, copper and brass. This diminutive cone-like cup with rectilinear base surprises and delights when viewed from any angle.

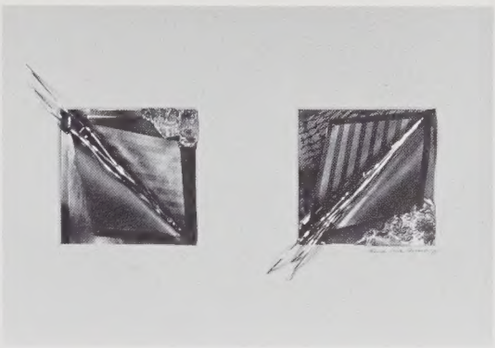
Metals, enamel, plastics and stones comprise the colorful *Man in My Boat* pin by Lynda Ross, which has a playful energy and spontaneous visual appeal. In contrast, Colette's *Column #4* is subtly enriched by symbolic detail. The black sculptural monolith, emblazoned with a glowing cloisonné enamel brooch, exudes hieratic power. Also special were Barbara McFadyen's *Lightning Fair* fibula and/or necklace fabricated of reticulated 14k gold and sterling silver with diamonds, Betsy Douglas's elegant bracelet of gently folded sterling silver and Cathy Lynne Holt's *Wild Beast Kimono* necklace of 14k gold silhouettes over patterned sterling silver.

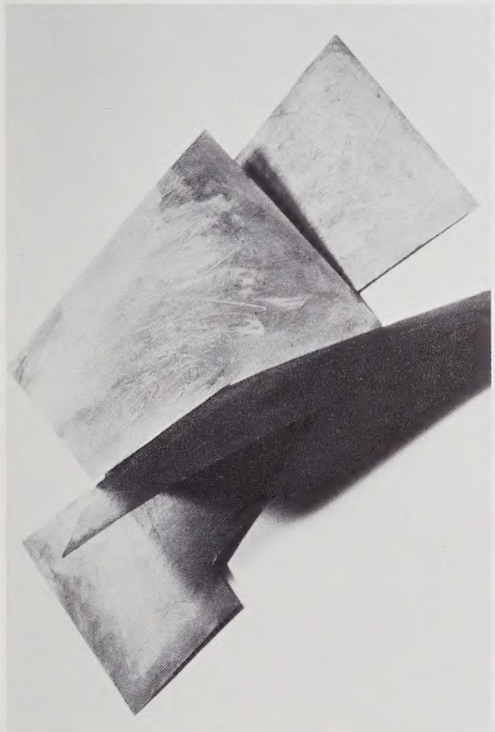
Noel Thompson, who, with obvious care and imagination, supervised the installation, is to be congratulated for organizing the large number of diverse works into a coherent, exciting exhibition. "Contemporary Metals USA" should be an annual event because it demonstrated that the artists who share the joys and frustrations of working with metal, who chose metal as the medium for expression, make metal contemporary.

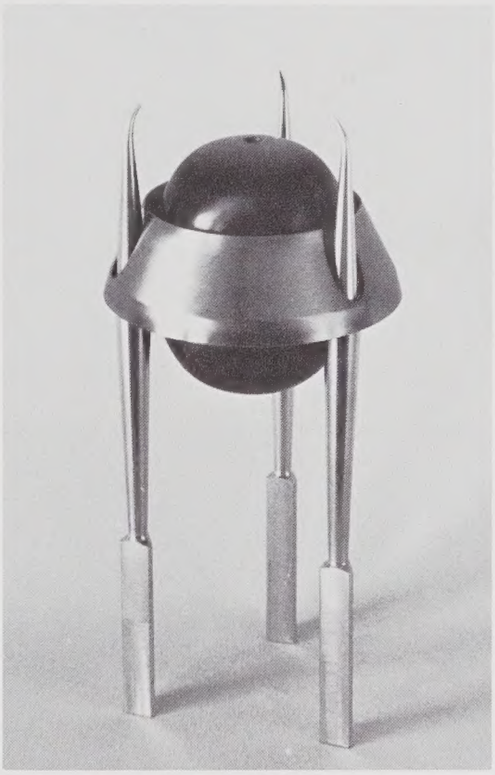
A narrated videotape documenting the exhibition will be available from the Downey Museum of Art, 10419 Rives Avenue, Downey, CA 90241.

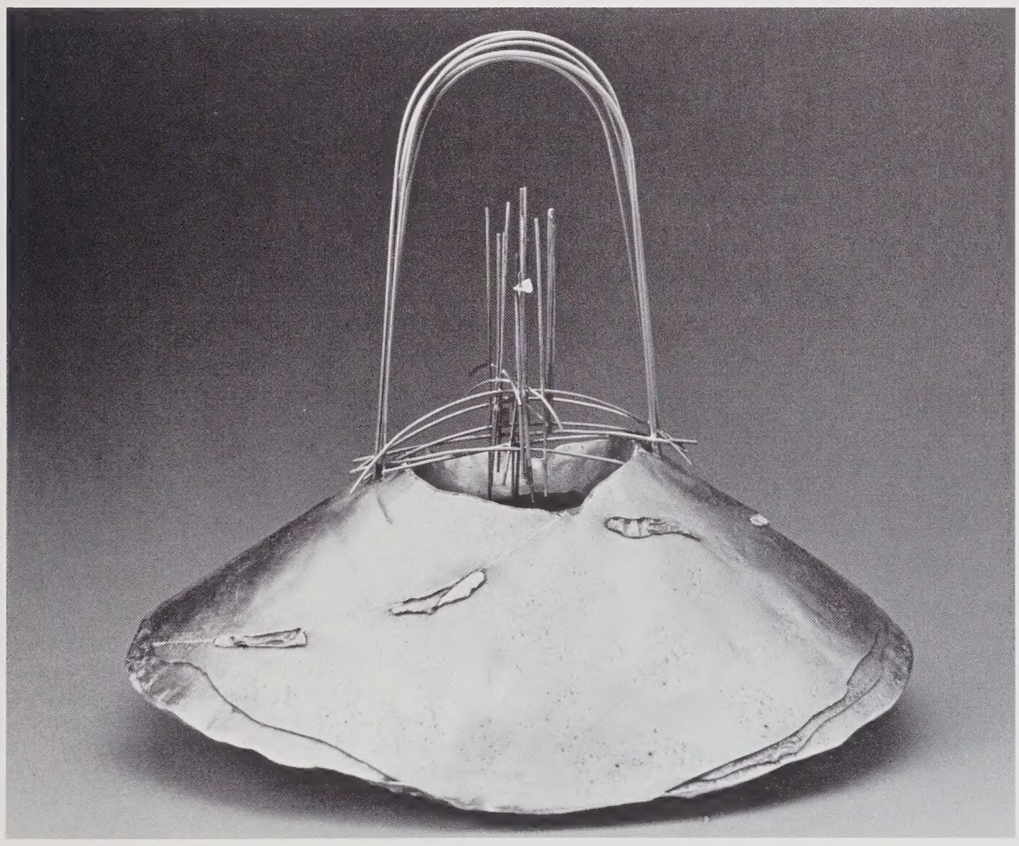


Above left: Lynda Ross, *Man in My Boat,* copper, silver, aluminum, plastics, turquoise, crystal, enamel, brass, 3 x 2½"; **above right:** Cathy Lynne Holt, *Wild Beast Kimono,* sterling silver, 18k gold; **opposite page, clockwise from top left:** Betsy Douglas, *Bracelet 1, Folded Form Series,* sterling silver, 2¼ x 2 11/16 x 2⅜". Photo: Bill Lorenz; Clara Ines Arana, *Composition II,* titanium, tantalum, nickel and sterling silvers; John D. Wittersheim, *Vessel 96,* steel, aluminum; William Baran-Mickle, *Pacific Movement,* brass, copper, nickel and sterling silvers, 12½ x 9½ x 11". Photo: Jamey Stillings; Heather Marcus, *Black Slash,* steel, gesso, acrylic, 23 x 30 x 8"







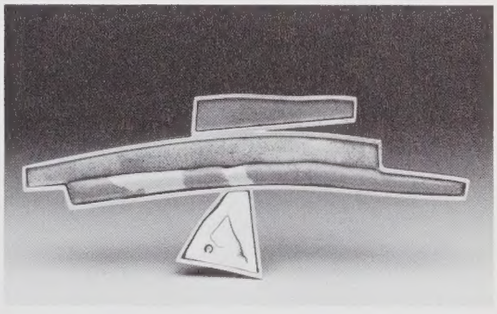


Jamie Bennett
Helen Drutt Gallery, Philadelphia, PA
January 26–February 23, 1985
by Brigid O'Hanrahan

Jamie Bennett has used enamels combined with metal as a medium of esthetic expression for many years, mainly in the form of jewelry, and more recently with wall reliefs, in which reference to the human form has been a continued theme. Earlier work has been described by C.E. Licka as using talismanic and totemic forms that have a prehistoric quality in evoking the human form. Imagery from later work included fragmented torsos from classical Greece and Rome, as well as pieces from paper patterns used for clothing construction. In this work the body was fragmented, idealized and impersonal. The pieces suggested miniature framed paintings, the surfaces of which reflected the imagery, smooth and refined, like paper or marble, with no mark of process.

New work shown here built on the past while moving in a different and exciting direction. Multiple elements combined in one piece to make new forms, yet retained their individuality. The forms that made up each piece broke out of the frame with an animated, directional movement, a subtle freedom of gesture that created a sense of captured motion. Some pieces seemed to take the form of a series of brushstrokes; some had a figurative quality, a detail of a portrait; others appeared to be a partially seen landscape, as if viewed through a window. While the colors used were still subdued, they were warmer. Marks of bright color shot across muted backgrounds, enhancing the sense of captured process. The surfaces reflected these changes as well. The neutral, flat smoothness of previous work was now a tactile surface, combining matt and textured areas that invited contact. Within a single piece separate enameled sections came together with soft, rounded edges that imparted a human quality to the forms. The work exuded a presence that was active and personal.

The show was a strong one. I was intrigued by the sense of captured movement present. Bennett's work is developing in a direction that is at the same time more focused, more personal and more immediate, and I found that very exciting.



Jamie Bennett, *Colortura-2* brooch, enamel, copper, silver, 1¾ x 4". Photo: Andrew Dean Powell

Jamie Bennett Selects

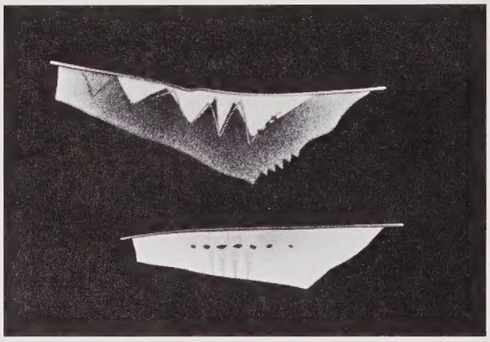
Plum Gallery, Kensington, MD
May, 1985
by Gretchen Klunder-Raber

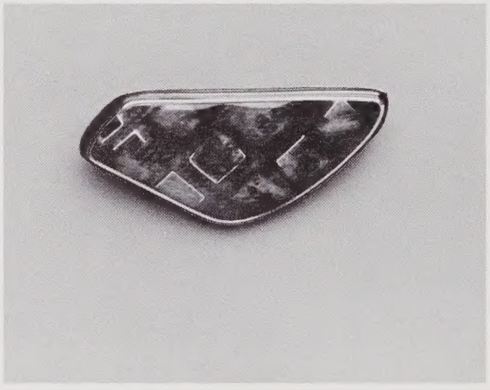
"Jamie Bennett Selects" reflected the Plum Gallery's current concept of having regional master metal designers select a group of young, lesser known artists whom they feel significant and for whom they have a stylistic affinity. Bennett selected Young Ja Baek, Tracy Cavanaugh, Rebekah Laskin and Donald Friedlich. That definition is not accurate for the latter two, who are relatively well known. The general impact of the show was that of an intimate experience. The space is small and the number of works limited; it was not an ambitious show.

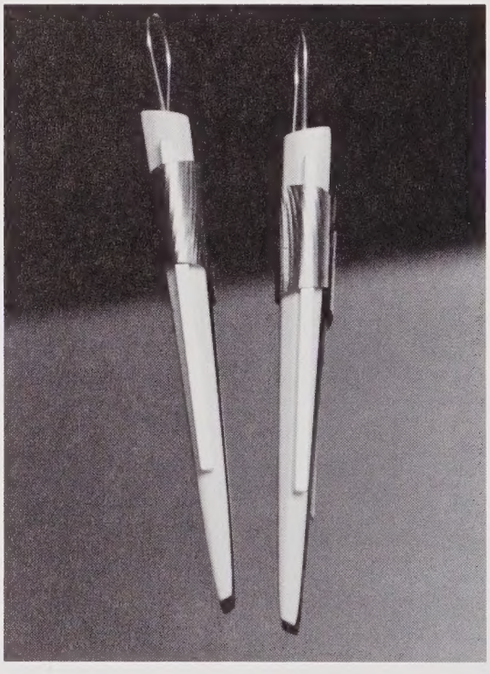
While each artist has a different direction, three of them were linked by a stylistic thread. Donald Friedlich has the gift of exquisitely refined proportion that achieves a miniature monumentality, as seen in both his *Tension Series* and *Interference Series* brooches. In these slate, gold and titanium works, their superb art-fashion orientation was graphically clear. Not so clear was the work of Young Ja Baek, where there was evidence of a confusing message of casual technique and primitive forms, which were either very studied or very searching. I'm inclined to believe the latter. It is a deceptively difficult genre to work, in which one communicates the eloquence of the primitive iconography with a controlled relationship of materials. One guideline for serious students should be to unify their style through work in series. Note the work of Reinhold Reiling.

The large, heavy bezels by Tracy Cavanaugh were too restrictive for the low-key design of her enamels. Incorporating enamels into the jewelry object seems to pose the greatest challenge to many enamelists. However, this is not true of Rebekah Laskin, who handles the challenge with elegant lines, beautiful shapes and proportioned edging. She breaks the metal edge into functional design elements. Similarly, there is wonderful color, tone and surface painting. The restrained pastel color gradations contrast with diffused tone grids of enamel color. These are punctuated with accents of tiny metal shapes that mask rivets. Bruce Metcalf is another master of this technique.

Finally, for that "to-the-point" quality of the master metalsmith that says all in the most economical terms, there is the work of Jamie Bennett. Three of his long, playful brooches exercised the eye with patterns, shapes and colors as seminal as those of Paul Klee. The raw simplicity of the bezels rise with sophisticated angularity to protect, define and articulate the design. Another elemental brooch was a puzzle structure of contrasting patterned pieces united by color and tone. The viewer is rewarded by seeing thought and resolution handled with the assurance that comes from talent and experience.







Top: Rebekah Laskin, two brooches, enamel on copper, sterling silver, 3¾ x 1" and 3¼ x ¾"; **center;** Tracy Cavanaugh, *Knew She Was Square* brooch, silver, enamel. Photo: Andrew Dean Powell; **above:** Donald Friedlich, earrings, ivory, 18k gold, sterling silver

Contemporary Blacksmithing

Signature Gallery, Boston, MA
February 22–March 30, 1985
by J. Fred Woell

This show exhibited a variety of unique objects that continue the traditions of blacksmithing and give rise to some interesting contemporary possibilities for the blacksmith-artist. Objects I would not associate with the blacksmith were done by Bob Griffith (cross-country skis), Joseph Bonifas (jewelry and a decorative object, entitled *I've Got My Top Hat and Tails,* loaded with skillful craftsmanship, fine design and humor) Brent Kington (Wind Toy), and Robert Timberlake (digital pocket watch). This last I found extraordinary, not because it was different in shape or nature from the traditional pocket watch, but because he used Damascus steel "wood graining" as a powerful and effective statement of surface decoration. This seemed an eminently appropriate way to apply a traditional blacksmithing technique to a traditional object with contemporary digital electronics. I smiled at the thought of it.

The idea of a blacksmith making skis also fascinated me. The metalwork on the skis was the boot clips, and when you investigated them closely you found careful designing that expressed more than just function. The decorative file work on the metal boot clip was a very handsome touch, as was the overall shape and grace of the laminated wood skis. A sensitivity to form was also evident in Bob Griffith's small and elegant table sculptures. These were just as beautifully refined. His ability to paint one of these with decorative calligraphic lines and just a touch of red in the right spot reinforced my impression of his sensitivity and abilities to cross that bridge between art and craft.

There were other examples of that same ability in this show. The art of blacksmithing certainly has not died. Yet the way it has been learned by the contemporary blacksmith certainly shows up in the shapes and decorative motifs that were repeated over and over in many of the works. I really have no prejudice against scroll work, or the variety of twists one finds along the length of a square steel rod, if it is done well, is appropriate to the object's design and contributes to its uniqueness. However, there was plenty of evidence in this show where the twist and scroll was a conditioned response— a "Here'sssss Blacksmithing!" approach to design. There was also the usual use of the "wet-noodle" line that wanders in space to no particular conclusion. The fact that steel can be heated and turned into a continuous, senseless linear scribble in space or made to imitate a grapevine with leaves has to be treated with careful imagination. Pieces that I felt exhibited strong creative use of line were done by Michael Ficalora (*Wall Sculpture*), Joe Bonifas (*Wall Mirror*), Dimitri Gerakaris (*Fireplace Grate*), Brian and Judy Cummings (*Cheese Cutter*), John Dittmeier (*"Don't Tread on Me" Snake*), Joel Schwartz (*Gate*) and Michael Bondi (*Wall Light*).

Ironwork does not necessarily need to be perfectly refined. I like hammer marks on the surface, if they embellish or are in

character with the piece. Some work I found to be crude enough to border on unskilled. Certainly, part of the beauty of Stephen Bondi's glass table were the hammer marks that showed the way the steel was manipulated. The surface pattern developed by moving the metal by hammering also expressed a powerful decorative energy that heightened the tension in the design and nature of the table. The same thing happened in the steel forged armature of Michael Bondi's *Light with Arm*. You really could see the plasticity of the hot metal and how fluid it becomes under heat in the hands of a skilled blacksmith. Some work seemed crude, or even primitive in its execution and yet retained a sense of charm. Ira Dekovan's fireplace set had that charm, and his sense of humor came through even more forcefully in his *Donkey Hooks*.

This show was made up mostly of utilitarian objects. I wish I could have handled all of them. Those I could get my hands on I gave some simple tests. I was surprised at how poor the balance and uncomfortable the handles were on almost all the fireplace sets and the fire pokers. The best I tested I'd have to credit to Jimmy Fike's fireplace tools, whose rack was expertly finished. Logically he used two metal straps to hold together the three bars that made up the legs and rack hooks. It was a simple answer done expertly.

The knives in this show were excellent. Jimmy Fikes, Phillip Baldwin, Robert Timberlake and Daryl Meier know their craft, and the objects they exhibited had authority and were handsome.

The objects in the show that were purely meant to be taken as sculpture I found to be the weakest. They were particularly poorly matched to their bases. The best base-to-object relationship I thought to be the *I've Got My Top Hat and Tails* by Joe Bonifas. I was impressed by the Richard Sexstone's *Hip of Woman*. The sculpture's integrity, developed anatomically out of a plate of steel, was sensitively and forcefully expressive, despite a base that called attention to itself. Its wood grain and busy patterns of stains were an unfortunate distraction, however. The base-to-sculpture mismatching deals with the basic problem of transition. It is unfortunate that so many pieces failed on that account. The connecting element of one of the glass tables to the curvilinear leg was not only abrupt but looked like an afterthought. A candleholder in the show started at the bottom, with feet that imitated the paws of an animal, and ended up at the top with platforms that looked more mechanical in appearance. The integrity of the total design fails in such situations.

This show was well worth close scrutiny. The small space available for it, however, did not properly display nor do justice to an appreciation of the larger work.

Right, above: Installation view. Photo: David Bohl; **bottom:** Stephen Bondi, coffee table, forged steel and plate glass, 56 x 56 x 18". Photo: Colin C. McRae

Helen Shirk
Yaw Gallery, Birmingham, MI
March 16–April 10, 1985
by Gary S. Griffin

Helen Shirk's recent vessel forms may well prove to be one of the significant facets of her already illustrious career. But what are these, and where do they dovetail into the development of her work? Are they a radical change in attitude or simply a variation?

These nonfunctional works are titled *Vessel,* with a numerical code following. The term "vessel" has recently entered the metalsmithing vocabulary, probably appropriated from ceramics, and there is no question that Shirk is using the term to distinguish, or perhaps divorce, these new works from their ancestors, her holloware—*Bowls, Containers,* etc. If the titles indicate a move from functional to nonfunctional attitudes, then how do the works themselves secure this position? And, more important, what is that position?

The term nonfunctional opens the floodgates to an infinite variety of possibilities. Are these works illustrations or statements of her views towards holloware? Are the works metaphorical, autobiographical or are they formal, compositional inquiries? I think the last. These works are primarily exploring the vessel as format.

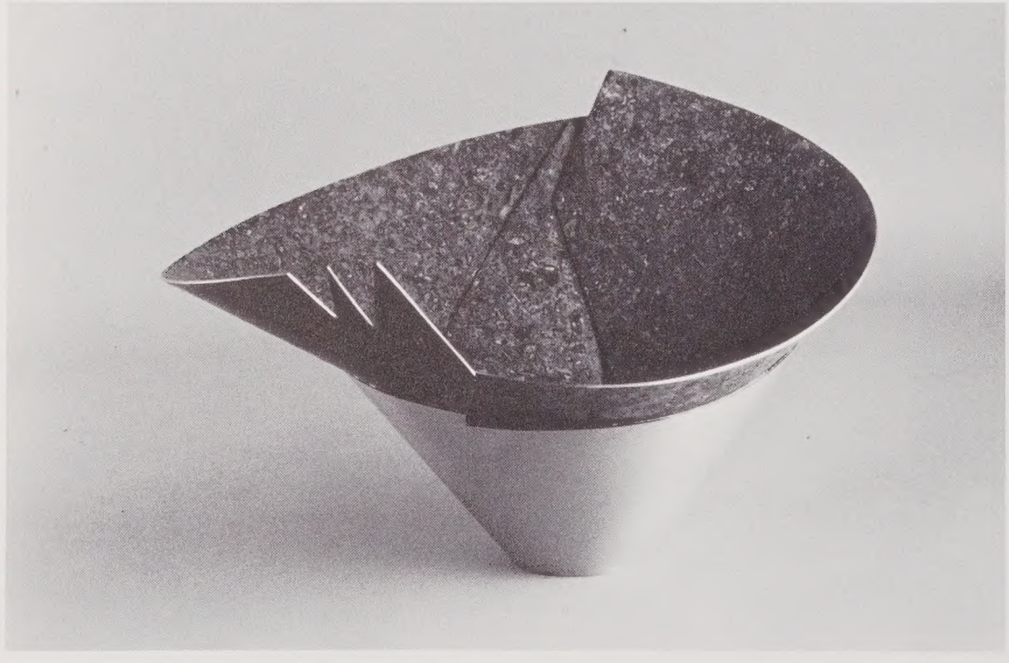
While making a break from function, or the implication of function, Shirk continues to exercise her well-founded talents in formal manipulation of design elements. This conclusion derives from analyzing eight of these new works at the Yaw Gallery, from studying Shirk's written statements about this new work and from following her work over a 10-year period. Although she cites the arid or desert landscape and flora as stimulating influences, these sources appear to be used literally rather than expressively. The vessels do have points, but to me they do not allude to the defensive spikes of cactus as much as they describe the aggressive shape of a punk electric guitar.

These vessels begin as an exploration of shape, that is, their initial phase of formal investigation is two-dimensional. Shapes are drawn and shapes are cut out. The shapes are subsequently formed to become the walls of inverted conical vessels. Shirk applies multiple patina hues to reinforce the distinction among these shapes, much as a label is applied to a can. Although we see form, that is, the three-dimensional vessel, we cannot avoid the graphic references. The shapes stand out as parts or pieces that label the form, that designate contents. This shape-form relationship, the formal meat of this work, while creating visual interest, is conceptually troubling. The stage is set for tension, yet I only find contradiction.

Why is Shirk attributing the aggressive shape of her forms to flora rather than popular culture? Why are the rather tight, restricted shapes and forms of this work meant to indicate the openness and expansiveness of the Southwest? With these and so many other uncertainties and contradictions, I can only conclude that these works represent formal inquiry. The works represent a highly developed sense of manipulating shape, color and form without conveying meaningful content.

These vessels give clear evidence that this is transitional work. Shirk's search for new arenas is to be admired and supported. It is courageous. However, it appears to me that while Shirk is seeking new expression and meaning, she is also carrying the baggage of her past formal investigations. Until she relegates her highly developed formal skills to become expressive tools, until she uses her formal skills as understood vocabulary, the work will remain in this transitional position, as formal investigations with content askew.

For another view on Helen Shirk's recent work, see Metalsmith, *Spring 85, volume five, number two, page 43.*



Helen Shirk, *Vessel CVI,* patinated copper, 8 x 6 x 5"

Plastic Crafts
Brookfield Craft Center, Brookfield, CT
April 14–May 26, 1985
Brookfield/Sono Craft Complex,
Norwalk, CT
June 6–August 4, 1985
by Akiko Busch

More than any of the polemics of Modernism or controversial canons of the International Style, it was perhaps the development of a new material that most influenced design of this century. The advent of the age of plastic in the mid-20s dramatically transformed the surface—both literally and figuratively—of furniture, furnishings and accessories, the decorative arts in general. For jewelers, the simple advantage was that Bakelite, Celluloid, Aladdinite and synthetic amber all nurtured a new and less reserved use of ornament, and the blunt geometric motifs of Art Deco especially were suited to expression in plastics. Yet human tastes being what they are, the very nature of the material—its indestructability, permanence and availability—were all cause for its diminishing appeal. As its material cost decreased, so too did its appreciation, until the very word "plastic" became synonymous with the commonplace, the contrived, the insubstantial.

Yet, like any other revolution of public taste, this one has come full circle. As items ranging from Greek columns to miniskirts will attest, everything comes back. Not only, then, have artists, craftsmen and designers been given to reexamining the material and esthetic properties of plastics and polymers, but the general public has been more given to enjoy and collect them. "Plastic Crafts," a national invitational exhibition curated by crafts consultant Rosanne Raab was both a demonstration and celebration of this rejuvenated appreciation on the part of woodworkers, weavers, quilters, ceramists and jewelers.

As the exhibition demonstrated, it is not simply that plastics and polymers have come back, but how they have come back that makes for the interest. Clearly, the material provokes a variety of treatments from jewelers and metalsmiths. In some cases, it is used almost in place of more precious materials. Lapis, ivory, bone, tortoiseshell and amber, we see, have their celluloid surrogates; they can be referred to obliquely or emulated outright. The black acrylic handles of John Horn's sterling silver flatware, for example, suggest the smooth surfaces of bone, yet there is a perfection to the edges that divulges their machine-cut origins. Linda Moughemer's acrylic hairpins are set with semiprecious stones and silver and brass decorative inserts, much the way traditional ivory and tortoiseshell hairpieces were ornamented. Far from being incompatible, as plastics and precious metals are generally thought to be, her pieces suggest that deliberate workmanship, an understanding of material, a sense of invention are indeed enough to assure their happy coexistence in a single piece.

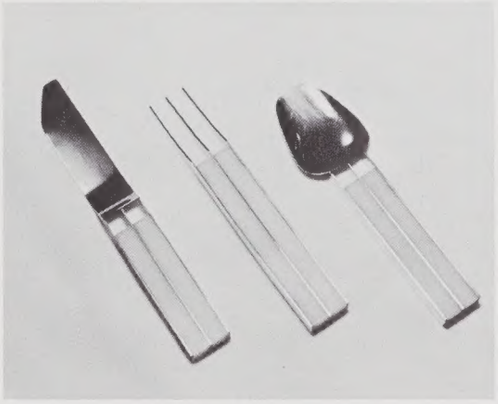
More brazen, however, are the pieces that present the material as precious and jewel-like in itself. Tracy Ruhlin's miniature threaded grid constructions have a preciousness more characteristic of rarer and

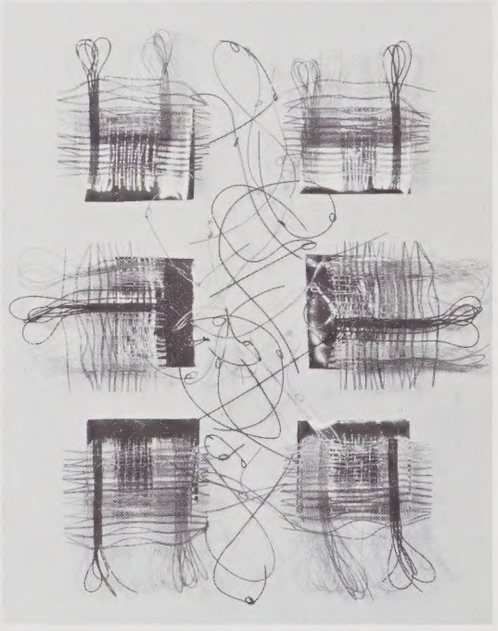
more costly materials. They are an affront, almost, to our notions of what constitutes value, and therein lies the appeal. Perhaps it is simply human nature to assign a value to material objects in direct correlation to their availability. Ruhlin's pieces delicately and precisely ask that we consider instead the wit, the sense of invention and the workmanship that have gone into construction. Likewise, Peter Handler's covered jars have been constructed of milled and lathe-turned aluminum. Lustrous epoxy resin insets suggest a bejeweled surface, but circular and oblong, they drift along the surface in forms not ordinarily found in precious gems. They too evoke images of precious metals and stones only to dismiss them. Again, it is the assault on our assumptions that gives them a value apart from the craftsmanship of their construction.

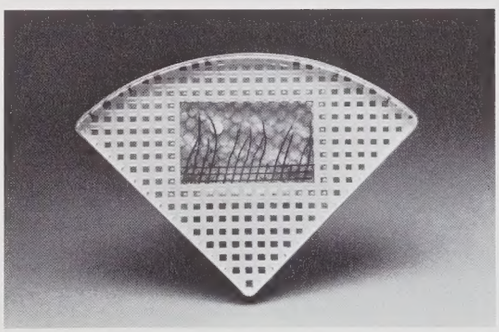
Finally, we have plastic for its own sake without the faintest allusion to anything precious or rarified. Bill Keith's necklaces are colorful collisions of fantasy shapes—lightning bolts, fragmented grids, geometric planęs. Tiny, elegant toys constructed in styrene, acrylic sheet and plastic resins and dyed in flashy, flamboyant colors, they could not be taken for anything other than what they are. Nevertheless, there is an elegance and a refinement of form that we rarely associate with these materials.

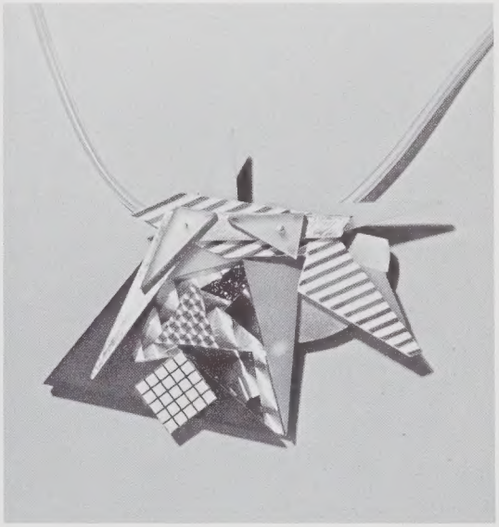
While these are the three most apparent treatments of plastics by metalsmiths and jewelers, what is refreshing are the ways in which a single piece may combine them. A piece of acrylic cut as a precious stone might be set in a sheet of phenolic resin that could be nothing other than that. The color, shape and textures of celluloid are indeed more varied than their counterparts in the natural world, and how craftsmen exploit these qualities, often to playful excess, while retaining the spirit of the natural material, makes for a provocative esthetic tension.

What is more appealing about these pieces, though, is the way in which they question and play, twist, turn, distort and otherwise dismiss our preconceived notions of what, exactly, constitutes value. Whether value is a quality attached to limited availability, monetary cost and perishability or one more intrinsically tied to imagination and craftsmanship has certainly been asked before, but not always with such art and innovation.









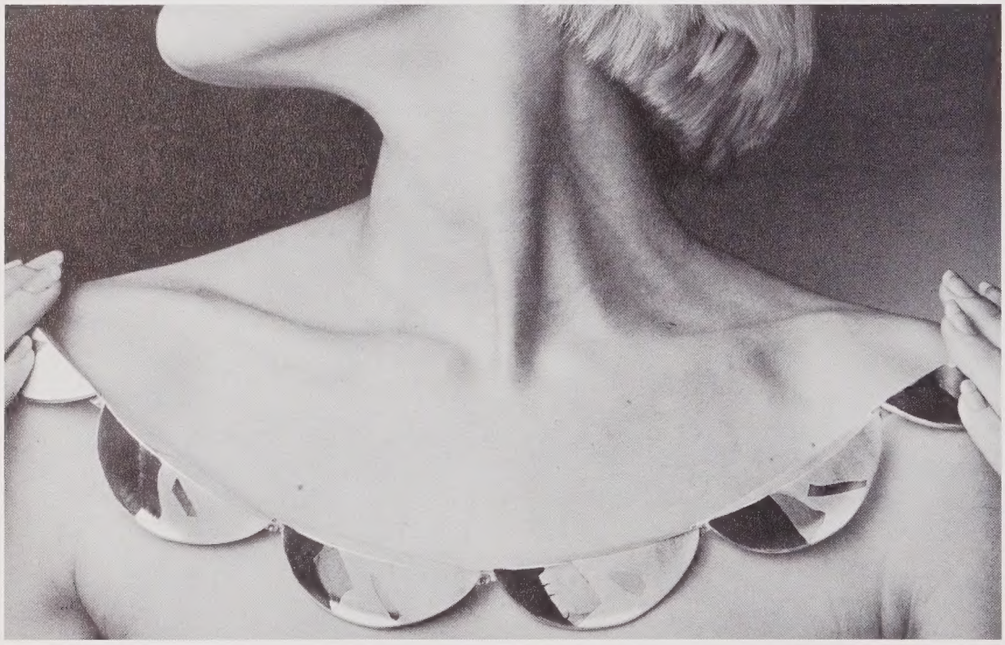
Clockwise from top: Peter Handler; Tracy Ruhlin, *Linear Module Miniature,* plain weave, procion dyed, monofilament, mylar sheet, plastic tubing; Bill Keith; Alan Burton Thompson, *Fan Brooch,* sterling and fine silver, acrylic, plastics, glass balls, aluminum, nylon screen, 2 x 2½ x ¼"; Linda Moughener, acrylic, semiprecious stones; John Horn, flatware, sterling silver, white Delrin inserts.

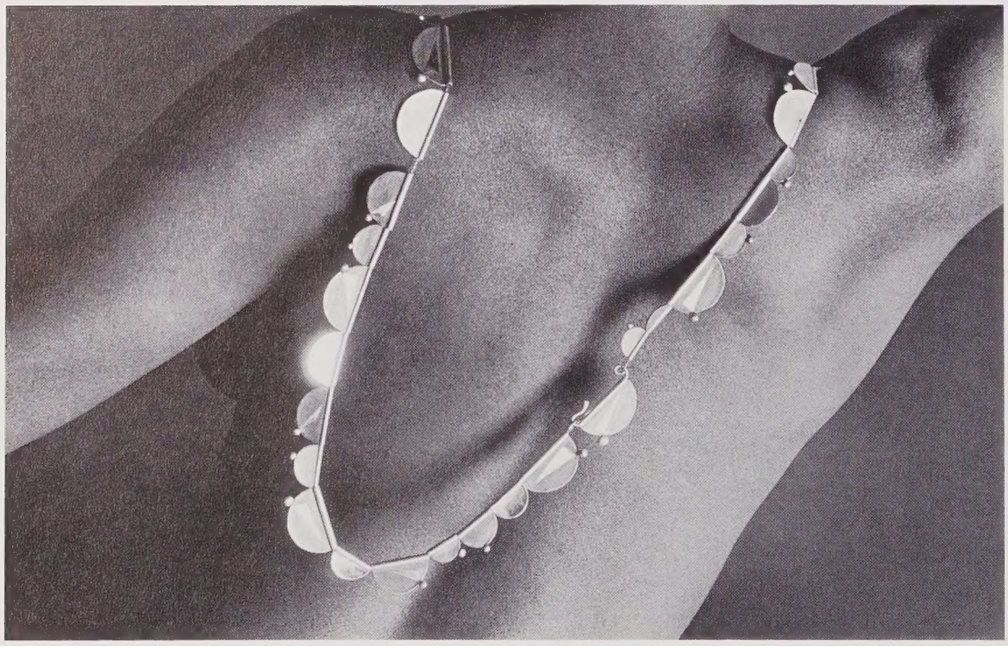
Dalya Luttwak: Portfolio Exhibit
Aaron Faber Gallery, New York City
April 8–May 2, 1985
by Komelia Hongja Okim

Dalya Luttwak's recent work shows the direct interplay of herself as an artist and precious metal as an instrument. After seven years of experimentation with a variety of techniques and design elements, simple circular forms have become the dominant image. These forms are sliced and divided, combined and re-combined in interpretations that make the resulting works unique and elegant. Cut-out sections are additionally utilized as elements in repetitive patterns or as segments of design in a descending order. The repeat patterns and forms are also apparent in the play of negative shapes. Her art evidences a sense of playfulness and spontaneity as she arranges and rearranges elements to create a mass in a minimal and simple fashion.

Luttwak was born in Israel and now lives in Washington, D.C. She has traveled extensively throughout Europe and the Far East, collecting art objects related to fashion and body ornamentation. This pursuit has led to an open but controlled exploration of the possible interpretations of her uncluttered images. Her simple but bold forms have been further dramatized by the use of 24k gold attachments, in the manner of *Keum-Boo,* a traditional Korean technique, just enough to break the simple surface and create an enrichment that brings enormous excitement to the work. The gold attachments were first used in the style of cut-outs, carefully layered and arranged on a silver background. In later works, the gold attachments have been dramatized by an oxidized black background and emerge as paper collage with 24k gold foil as the torn element. The total experience for the viewer is one of a harmony of contrasts in color, sizes and shapes.

Below: Dalya Luttwak, Two neckpieces, sterling silver, 24k gold. Photos: Tom Wolff





Ignatius Widiapradja: Sculpture and Sculptural Body Adornments
Contemporary Crafts Gallery, Portland, OR
May 23–June 15, 1985
by Jalaine Madura

"There is no conceptual difference between my sculptures and my sculptural body adornments." This observation by Ignatius Widiapradja about his work helps define the abstract relationship of the two types of art pieces presented in this show. However, it falls to the viewer to discern the practical distinctions between "sculpture" and "body adornment," and this distinction raises significant issues of function, material and object identity.

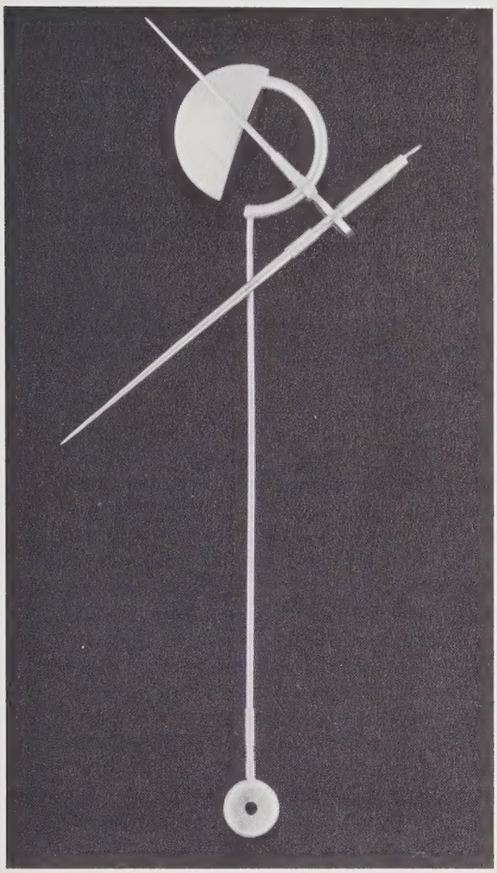
Widiapradja's sculptures appear as mixed-media constructions in space, assemblages of thread, bamboo, wood and copper. They present tiny dialogues of tension and suspension, meticulous wrappings contrasted with the exposure of slim, streamlined forms. Perhaps because of their scale, or perhaps because of the way they seem to have been crafted, they rest in their cases like silent, spiky artifacts. They are static, but they also pierce their respective atmospheres with ritualistic possibilities.

At first glance, the silver brooches also displayed at this exhibit suggest similar emphasis on design, space and linear clarity. However, the differences between the sculptures and the body adornments underscore practical and artistic distinctions. For example, the sculptures appear destined to remain encased indefinitely, labeled, catalogued and wondered at. As such, they take on not only the potential of use but the meaning of non-use as well. Their ultimate ritual may have more to do with creation and the artistic processes involved in realizing the potential of combined materials. The body adornments, conversely, can be displayed as they are in the gallery, but they are also meant to be used and worn. Therefore, they must be of more durable materials; the intersections of the slender pieces must be sturdy. Further, although other materials might be more serviceable and enduring, the use of silver satisfies our established human desire to decorate ourselves with precious materials.

As independent pieces, the body adornments are meant to be arranged and rearranged. Their kinetic possibilities invite the viewer to experiment, to discover different geometric configurations. This evolving symmetry harkens back not only to various areas of symbolism—metallurgy, astrology, even the origins of the written word—but also to more general ideas of artistry, design and esthetics. Interestingly, however, the wearer does not have such options, as the brooches can only be worn in one specific way, since they will not stabilize in alternate configurations. This surprising factor seems a bit conflicting and suggests that the pieces as body adornment are meant to be arranged and presented only in the way the artist intends. The viewer may explore the optional arrangements only until the pieces are worn, whereupon the artist's esthetic decisions take precedence.

Despite the reasonable assertion that the two types of work presented in this show are conceptually identical, there seem

to be great differences between them. By combining simple materials, simple forms and meticulous execution, Widiapradja achieves in the sculptures a quality of the primitive and the timeless. When applied to the body adornments, however, the effect seems quite the opposite. The pieces are just as purified, just as free of clutter and superfluity, but they are sophisticated and modern as well. As body adornments, they can be expected to appear and to be used in contemporary environments. For the viewer, the two outcomes of this exhibit are the recognition of conceptual similarity and clear evidence that the application of similar concepts to different materials and functions can yield substantially different results.



Ignatius Widiapradja, *Pennanular Brooch,* silver, 7½ x 3"

Munya Avigail Upin
Willingheart Gallery, Austin, TX
Spring, 1985
by Alice M. Shukalo

Munya Avigail Upin's work is at once reminiscent and startlingly specific: her unmistakable imagery brings up both memory and possibility, the mundane opening the way to the fantastic. Several of the pieces in this show were respects paid to past residences, the memories that preserve the fondness for one's old neighborhoods. *814 Prairie Ave.: A Farewell* and *934 7th Ave,* the numerals inscribed into the metal with the latter piece, are the more obvious statements. Upin also has created several pieces that she calls memory containers: small, sculpted pieces more open to the inference of the viewer. *Wisconsin Landscape* in sterling and nickel silver is a sight familiar to anyone who has driven miles over rolling, curving highways, the broken line dividing the road, the pavement itself receding into the vanishing point on the horizon.

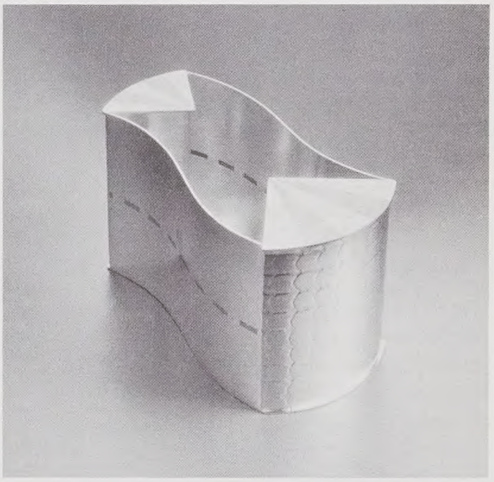
Upin's goals are immediately apparent: she wants to interpret her life to bring recognition not only for her own experiences but for those of the viewer as well. Her designs employ light, dimension and texture in fabrications that look deceptively simple. In fact, she says she makes only three to five pieces a year. One of her most important artistic influences is the work of the painter Leger, whose fascination with the precision of machinery resulted in an austerity of line, an abstraction of function and a fullness of character that infused his compositions with mystery and fantasy. Upin combines her three-dimensional imagery with a sensitive use of graphics, as did Leger. In fact, one of her pieces, a brooch made of sterling, copper and plexiglass, is titled *Homage to Leger.* Leger's love of the visually rich image, achieved with the careful composition of the abstract, clean-as-a-whistle form, is evident in Upin's work.

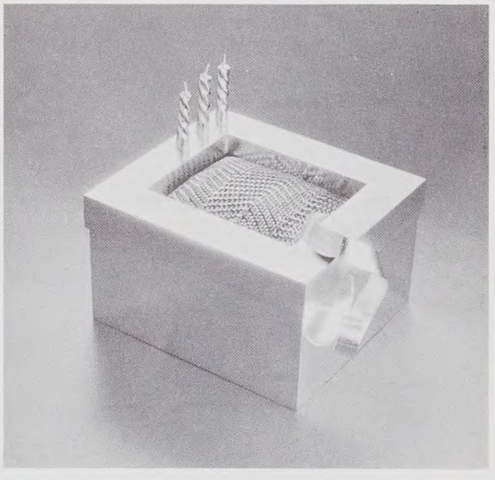
Upin readily acknowledges that her work takes two quite different paths, one of emotional completion, the other of artistic challenge. "There are my narrative pieces, and there are those that have strictly to do with design," she says. "My narratives are very emotional. They are mostly autobiographical. I have many fond memories, and I find solace in them. But I find lately that my pieces are changing into less accessible, more abstract pieces, partly because of people's comments about my work, saying it's cute and precious."

It's true that Upin's work is small, some even miniature, like *OK Cafe,* a brooch made of sterling silver and nickel, fashioned into a plate with a piece of pie and a pair of chopsticks, or *Memory Container II: Sleeping Gypsy,* a small box, the lid satin-pillowed on the underside, that opens to reveal a carpenter's toolbox set into the top and, when the toolbox is lifted out, a barre and ballet slippers underneath. However, the smallness of scale and the precision of the workmanship should not be confused with the merely decorative. Upin's work is not to be momentarily admired and then dismissed, but rather contemplated and embraced, to be returned to again and again, to grow more meaningful with time.

Her next project is to make a series of Jewish ceremonial objects. "I finally broke through with the *Mezuzah,*" Upin said of one of the pieces in this show. "I want the objects to be contemporary, to represent their ceremonial function, contain the symbology, and also have my own ideas. The most difficult part by far is the design.

"My work is a way to document my life," she adds. "I feel like I want some permanence about my life after I die. The pieces are graphic, narrative and autobiographical, but there is a preciousness about experience, memory and established intimacy. My pieces need to be held and examined. The thing of most importance to me is that connecting with another person's life, *my* connection with *them.* I want people to look at my work and recognize something about their own lives. It's like when I went to a show and felt almost naked because the artists knew so much about *me.*"





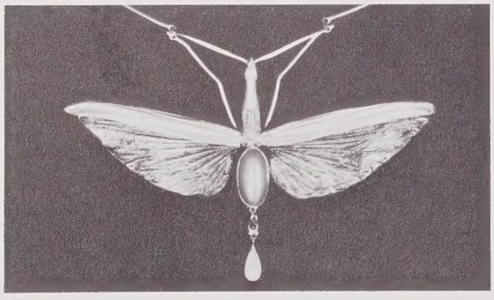
Munya Avigail Upin, **top:** *Wisconsin Landscape,* sterling and nickel, silvers, 2½ x 4¾ x 2¼"; **above:** *814 Prairie Ave.: A Farewell,* sterling and fine silvers, 5 x 3½ x 3". Photos: Joe Long

Elisabeth Kodré-Defner
Elaine Pottery Gallery, San Francisco
April 2–27, 1985
by Britta Schömer

Jewelry has always been more than a body ornament. In various societies and times it has been looked upon as symbol, carrier of cultural values and object of ritual or magic. Elisabeth Kodré-Defner's work is part of that tradition. Her shells and snails, precisely cast in 22k gold, a rich and warm metal, draw attention to surface structure that in nature often disappears behind color. A variety of subtle and complex textures form intricate patterns and demonstrate the perfection of nature's designs. Shells are assembled into clusters and combined with rubies, sapphires, opals, emeralds, diamonds or ivory drops to create jewelry that never appears merely decorative and precious but transmits a feeling of significance. Pendants, necklaces, rings and earrings focus the viewer's attention and invite contemplation of forms, which, as the artist points out, could possibly disappear.

The beauty inherent in dead substance becomes even more apparent in her insects and beetles. Accurate gold castings of dragonfly, scarab or stag beetle bodies, often hinged to imitate the natural movement of segments, spread their white gold wings open in a posture of symmetric harmony. With precious stones balanced between antennae in perfect equilibrium, they don't give the impression of flying away but seem suspended in a state of transformation. Recognizable species or abstract interpretations are composed in strikingly attractive necklaces and meditation pieces on the cycle of life and death, matter and spirit.

With her fetishes the artist enters the realm of magic. Bird skulls and a small crocodile skull, cast in various alloys of silver and gold in shades between cold gray and light yellow, form the masklike center of heavy pendants and are set off by ivory horns, feathers and wing- or hornlike shapes of black copper and colored titanium. Precious stones are carried above the head, on the forehead or between the eyes. A drop or ring may hang from the tip of the beak. These jewelry pieces, often displayed on top of a "magic stick," are reminiscent of primitive art and African or American Indian symbolism. They have an archetypal quality, stimulate the imagination and evoke strong feelings. Viewers react either with fascination or dislike, rarely with indifference. Beyond its high degree of perfection in design and technique, Elisabeth Kodré-Defner's work has the power to move.



Elizabeth Kodré-Defner, *Grasshopper Pendant*, 22k yellow gold, 18k white gold, orange moonstone, opal drop

An International Gathering
The Society of North American Goldsmith's 1985 Conference
by Pamela J. Ritchie

What binds us together are quarrels, gossip, envy, jealousy, rows, noisiness, lack of consideration and moderation, but also endless talks, long nights and lots of love.
Otto Künzli

This statement could well have been made by many individuals upon reflection on their friends and colleagues. But in this case it is an excerpt from the International Exchange panel of the Society of North American Goldsmith's 1985 conference. Our professional ties, and relentless curiosity, are indeed what bind us together and brought us together to mark the 14th SNAG conference. Over 400 metalsmiths and interested individuals from 6 countries gathered in Toronto, Canada from June 12 to 15. They came to participate in seminars, panel discussions, lectures and workshops by influential artists, curators and critics.

"It is very appropriate that this first SNAG conference outside of the United States should be held in Toronto," Chairman Don Stuart explained in his welcoming remarks: "It was here that the concept of the Society of North American Goldsmiths was formulated. Philip Morton was teaching in Toronto in the late 1960s and in consultation with Hero Kielman the idea grew until together they flew to Chicago to meet with the others to found the society." With emphasis on exchange of ideas, the SNAG 85 committee aimed that the conference be, according to Stuart, "a time for professional stimulation and social interaction." Panel discussions and lectures were a key focus for this exchange, although with inconsistent success.

The International Exchange panel, which could have been construed as the keystone of this conference, was moderated by Robert Ebendorf and composed of Paul Derrez, the Netherlands, Otto Künzli, West Germany, Gillian Packard, England, Heidi Sand, Norway and Marjorie Schick, United States. Ironically, the host country was not represented on this panel. After an introduction by Ebendorf, which reviewed previous exchanges made by organizations such as SNAG and the World Craft Council, each panelist gave a personal account of his or her experience or efforts towards international exchange. Ebendorf also stated, optimistically, that an objective for this discussion was to lay new groundwork for the next 10 years. It quickly became apparent (and was later confirmed by a panelist) that the panelists had not been briefed by questions or statements in advance, an approach normally taken when organizing panel discussions in order to encourage formal discourse. Each panelist did, however, raise potentially valuable issues: Heidi Sand of Norway spoke of her experiences living and studying in the United States and stressed the importance of exchanges between schools. Sand also announced the 1986 exhibition of Norwegian jewellers to be held in the United States and expressed her hopes for continual international contacts. Gillian Packard extended a warm welcome to groups and students to Goldsmiths' Hall, London. She spoke of educational exchanges, noting that there were 23 schools teaching jewellery and silversmithing in the United Kingdom. Packard also commented on the economic problems that restrict employment exchange in England. Marjorie Schick simply encouraged everyone to pursue an exchange of ideas through reading, travelling and exhibiting abroad. Otto Künzli, quoted earlier, spoke of personal exchange between individuals and of the recent "Cross Currents" exhibition held in Sydney, Australia, which showed works by artists from Britain, Holland and Germany, as well as Australia.

Although pertinent issues of education, employment and exhibition were raised, one could not help but notice that new approaches towards laying a future groundwork were not being examined. Nor was there any rigorous investigation of the already established vehicles through which exchange presently occurs.

Fortunately, Paul Derrez, owner of Galerie Ra in Amsterdam and himself a jeweler, went somewhat beyond a personal account to discuss the significance of exchange and to query its existing means. He advocated an increased interest in communication and an acceptance of responsibilities in this direction, stressing the need for more awareness of different artistic approaches, ideas and issues, for more analysis and comparison and for cultural research. To paraphrase Derrez: "Jewellery is just a vehicle to communicate an idea of the artist . . . the gallery is a place to explore ideas for an audience . . . . In a small country you can have a lively art scene but it may also become dull." Ipso facto, professional stimulus through exchange is a necessity; it promotes and creates healthy competition. Derrez advocated individual responsibility for certain aspects of exchange, i.e., teachers for students and curators for exhibitions. He also asked: "Why doesn't an international magazine exist? Who will do this?" Later, he clarified this by stating that it must be a new initiative and not rely on existing publications such as *Craft International*. After a brief summary, Ebendorf opened the discussion to the floor. Concern over the disparity of tuitions was brought up as an inhibiting factor in student exchange. Joyce Chown from the Nova Scotia College of Art and Design remarked that this problem was overcome there by setting up a system with other schools, to have students pay tuition at thier home school. Paula Letki asked that calls for entry to juried exhibitions be extended beyond local boundaries to include more international submissions.

A relevant issue not covered by this panel (although much discussed throughout the conference) is the need for an international jewellery resource center and library. This facility, ideally, would catalogue and call for documentation of current and past work without bias towards materials or ideologies. Its main function would be as a research centre for critical and historical studies.

Perhaps it was too short a time period, too impersonal a space or too broad a subject to facilitate active dialogue. This panel discussion did, however, at least introduce

the subject, which should now continue to be addressed in all its ramifications.

In "Developing Jewellery Criticism: Issues, Attitudes and Frameworks" moderator James Evans set out, constructively, to raise more questions than answers. He felt these questions might lead to "a formulation of an approach," but a resolution was not expected. The panel was asked to prepare a statement in response to all or some of the following questions: "Is the very notion of an academic jewellery discourse desirable? Is it perhaps pretentious? Does the notion need justification? What do you envision as the most critically profitable path on which to embark, i.e., formal, contextual, etc? Are there critical practices already in place or will the crafts' (jewellerys') critical ground be different and require its own theoretical grounds? Perhaps just modification? What might these special considerations be? How best can assessments be made? To whom are we addressing such criticism anyway?"

The panelists, Sarah Bodine, Helen Drutt, Paul Derrez, Carol Hanks, and Joke van Ommen rose to the occasion. The consensus was that: we must eliminate the mediocre from our magazines, raise opinions and disagreements, lay new groundwork (citing photographers as exemplars in this area). Derrez noted, "We can't wait for art historians to make studies; we mustn't be dependent in this way . . . everybody on each level should develop more theoretical discussion." In short, three areas of criticism were covered: justification, methodology and change.

The need to discuss and justify the basic premise of jewellery criticism seems to still abound. In fact, too much time is spent on this issue. Evidence can be seen in the following excerpts from both audience and panelists: Why do we need it at all? It is not helping us . . . are we using critique in order to make ourselves legitimate? . . . What are galleries looking for in criticism? . . . Criticism is needed to create a community dialogue, to document work, to stimulate discussion for the artist, as a proper intellectual format to look at work historically, to clarify work for the public, to create an appreciation and an understanding, finally, and significantly, to raise issues. Certainly a more definitive justification than these collective statements is not necessary!

When considering which path of criticism would be the most profitable to take, Sarah Bodine astutely said "all . . . If formal properties are paramount in the work, then a formalist critic should apply his perspective and so on." Bodine also suggested that there are two types of theory that underlie critical writing. 1) comprehensive theory, e.g., Marxism, Feminism, and 2) conjecture. Carol Hanks suggested that we free ourselves from the overwhelming concerns of methodology and simply encourage statements in print as much as possible. She felt that in the beginning this may be a free-for-all approach but that it would eventually build up a solid dialogue. Comments were made on the processes of description, analysis and interpretation. Joke van Ommen voiced her opinion that critical talk and pictorial information were more profitable than formal writing. Helen Drutt and Sarah Bodine addressed the importance of change in the discourse of art history and criticism, where pluralism is seen to have broken down set structures. Mention was made several times during the conference of this concern. It is an obvious issue to many other art disciplines, as evidenced by the recent *Vanguard* article by Dennis Lessard "Art Criticism and Contemporary Art History, Towards a Transformation."

It seemed that the buzz words for the conference (and to some extent during this panel discussion) were plurality, individualism and subjectivity. This does not hold any surprise, as they are common in art vocabulary today. One wonders where the issues surrounding them will take us and how they will be perceived retrospectively. This concern will no doubt be raised at the next conference: How will the plurality of styles and values continue to affect our work? Will this diversity and stress on individualism strengthen or weaken our art? Is the subjective approach to viewing art breaking down barriers to art production or is it building new ones upon the established? Is it indeed a kind of self-imposed naiveté or historical amnesia?

Certainly Evans and his panel were successful in their attempt to raise questions. Questions poured out, not only about criticism itself but also about the very issues it raises. It is a very timely subject and one worthy of continued dialogue.

But the pièce de résistance of the conference was Otto Künzli's "Walpertinger and Other Short Stories." To do this performance/lecture justice in a description would be impossible. Suffice to say that it was an intelligent and humourous retrospective of his work—a work where the concept, content and materials balanced to produce an effective whole.

Other lectures and discussions, though perhaps less entertaining than Künzli's, were certainly thought provoking and noteworthy: The methodology Carol Hanks used to put together "Canadian Jewellery in Context" was one of stylistic analysis to include form and content. In her lecture she discussed the dichotomy of form (natural or organic as opposed to manmade or geometric) and the contemporary efforts to combine these polarities. Hanks broke the evident plurality of styles into four groups: 1. The decorative—purely for aesthetic worth. 2. Talismanic—not symbolic but enigmatic/suggestive of a spirit within. 3. Situational—related to performance and that which can often be ephemeral. 4. Discursive—political, environmental or social statements—power or money display—cultural or religious commentary. The structural clarity of Hanks's presentation made her potentially confusing material surprisingly accessible.

Helen Drutt's anecdotal and informal lecture on "Contemporary Jewellery in the United States: Two Decades—Its Presence and Influence" showed us a diversity of styles, influences and philosophies. Her closing remarks were couched in optimism for continuing a dialogue among Canada, Europe and the United States.

The fundamental question of how to develop ideas of form was addressed by Michael Rowe. He expressed his interest in creating holloware for contemplation more than domestic function. In developing his ideas he aspires to set a new paradigm that does not rely on trends but embodies a personal concept.

Lois Betteridge presented an excellent documentary-style survey of Canadian metalwork. Betteridge effectively covered the history of metalwork from the French regime 1534–1890 to the contemporary scene 1969–1985. In her closing remarks Betteridge acknowledged the problems arising in education today, i.e., closures of art and metal departments in colleges and universities. She stated that we must "muster our resources and fight . . . to create an awareness of the need to reinstate our educational facilities."

Paul Derrez included both historical insight into the development of Dutch jewellers as well as a comprehensive survey of other artists represented in Galerie Ra in his slide lecture "From National Identity to International Diversity." When speaking about this exemplary gallery he said that his aim is to support experimental jewellery. His policy involves three aspects; to introduce artists by solo, retrospective, group and theme shows, to exhibit a variety of work and to provide information on the work.

The overall tone of the conference could be characterized as thoughtful. Perhaps there were indeed "quarrels, gossip, envy" but altogether the 14th gathering of the Society of North American International Goldsmiths resulted in a well-organized, theoretical, inquisitive and frank exchange of many of those issues most important to our future success as artists.

If any general criticism of the conference could be made, it would be that the topics were sometimes too broad and the time too short. We are at a point now in our development as artists where we must narrow our fields of discussion and begin to examine them more carefully in a scholarly fashion. These conferences and this magazine provide an excellent opportunity for such reports, but perhaps they are not enough. Perhaps we need an international publication which would deal solely with issues of criticism. Perhaps we need one for history or for technological papers. But, again, we must ask ourselves: Who will take on this responsibility?

SNAG 85 was cohosted by The Metal Arts Guild and the Ontario Crafts Council on behalf of the Society of North American Goldsmiths.

Pamela Ritchie is Head of the Jewellery Department at Nova Scotia College of Art and Design and has exhibited her work internationally.

Metalsmith
Index to issues 4/1—4/4, 1984

Compiled by Joanne Polster

Abbreviations are as follows: *il* denotes illustrations and text; *illus* denotes illustration only; *por* indicates photograph of the artist; *exh* or *bk rev* indicates exhibition or book review. *S, F, W, Sp* indicate Summer, Fall, Winter or Spring issues respectively. Listings pertain to the United States unless otherwise noted. An asterisk indicates major articles or reviews.

ABRASHA Illus: Bracelet-watch (stainless steel, emerald). 4/3:44 S84
ADELL, Carrie *exh rev 4/1:45 W84 (il); Illus: Rock groups: metaliths, manoliths and touchstones (married metals). 4/3:42 S84
ADELL, Carrie, jt. author See: Renk, Merry
AGUADO, Deborah *4/1:40-43 W84 (7ils)
ALBAIR, Stephen Illus: Kiss (gold and ivory pin). 4/1:32 W84
ALESSI collection *4/2:36-8 Sp84 (7ils)
ALLISON, Christopher Illus: Steel form, slightly rusted. 4/3:13 S84
ALLOTEY-JORDAN, Faith Illus: Lunar ellipse earrings (nickel silver, iron wire). 4/4:13 F84
ALLOYS See also: Shakudo; Shibuichi
ANDERSON, Robert H., jt. author See: Plume, Vita
APPENZELLER, Hans *4/1:18-21 W84. (8ils; cover il)
ARCHITECTS as designers *4/2:36-8 Sp84 (7ils)
ARD, William Tools of the trade. 4/1:14-17 W84 (6ils; pors)
The ARDAGH chalice *4/2:6-16 Sp84 (5ils; 6diags)
ARENTZEN, Glenda Illus: Waterfall earrings. 4/4:47 F84
ARRITT, Yvonne Betty Helen Longhi: new jewelry: Plum Gallery, Kensington, MD. 4/3:55 S84 (2ils)
ART Institute of Chicago — History 4/3:26 S84
The ARTEMIS medallion *4/1:22-3 W84 (ils)
ARTIST-in-residence programs See also: Artpark
ARTPARK *4/2:34-5 Sp84 (il)
ARTS AND CRAFTS MOVEMENT—History *4/3:20-27 S84 (7ils)
ARTWEAR, New York City *4/3:28-31 S84 (4ils)
ASHBEE, Charles R. 4/3:22 S84
BAKKER, Gijs Illus: Chrysant (neckpiece, plastic, dried flower petals) 4/4:21 F84
BALDRIDGE, Lynda and Mark Joan Michlin: current metalsmithing: Creative Metalsmiths, Chapel Hill, NC (exh rev) 4/1:49 W84 (il)
BALDWIN, Phillip *4/1:14-15
BARNHART, Genevieve Illus: Estella (bronze sculpture). 4/2:44 S84
BARROS, Anne James Evans: jewelry, & small objects: Prime Canadian Crafts, Toronto, Canada. 4/4:51 F84; Masterpiece in metal: the Artemis medallion. 4/1:22-3 W84 (3ils); The Metal Arts Guild of Ontario. 4/2:43-4 Sp84 (5ils)
BARRY, Dalene Komelia Hongja Okim: Plum Gallery, Kensington, MD. 4/3:51 S84 (2ils)
BERGMAN, Franz—Influence (Irena Brynner) 4/1:6 W84
BENNETT, Jamie American holloware: changing criteria. 4/3:6-13 S84 (11ils; cover il)
BERNSTEIN, Bernard Modeling in wax for jewelry and sculpture by Lawrence Kallenberg (bk rev). 4/2:46 Sp84; Tools + techniques: pumice finishing and brass wire brushing. 4/1:52 W84 (drwg); Virtuoso: a symposium: Cooper-Hewitt Museum; New York City. 4/3:54-5 S84 (il)
BETTERIDGE, Lois Etherington *exh rev 4/3:47 S84 (2ils)
BISCHOFF, Manfred Illus: Brooch (sheet metal, paint). 4/4:18 F84
BISCOTTO, Laura Illus: Necklace and bracelet (nylon, elastic). 4/2/42 Sp 84
BLACKSMITHS, American See: Wallace, James
BLACKSMITHS, American—Exhibitions See: Yellin, Samuel
BLADESMITHS See: Knifesmiths
BLAUER, Ettagale Feedback: judging the 1984 JM/SNAG platinum jewelry design competition. 4/4:44-7 F84 (10ils); Weckström on Weckström. 4/4:34-7 F84 (8ils; por)
BOEKHOUD, Onno Issues: some thoughts on international jewelry (commentary). Deborah Norton. 4/4:60 F84
BONNER, Jonathan *4/2:28-31 Sp84 (4ils; cover il)
BOOK reviews Evans, Chuck. Jewelry, contemporary design and technique. Paula Dineen. 4/2:45-6 Sp84; Finegold, Rupert and Seitz, William. Silversmithing. Tim McCreight. 4/2:46 Sp84; Kallenberg, Lawrence. Modeling in wax for jewelry and sculpture. Bernard Bernstein. 4/2:46 Sp84; O'Connor, Harold: The flexible shaft machine: jewelry techniques. Randall Gunther. 4/4:59 F84; Wolters, Jochem. Die granulation, (text in German). Hannelore Gabriel. 4/4:59 F84; Zeiss, Walter. Setting of gemstones. Tim McCreight. 4/4:59 F84
BOOTH design *4/4:26-9 F84 (5ils; drwg)
BOROSON, Lee Illus: Saki serving pitcher (silver). 4/4:54 F84
BOWMAN, Gail Illus: Necklace and earrings. 4/4:50 F84
BRAIN, Charles Lewton See: Lewton-Brain, Charles
BRASS wire brushing *4/1:52 W84 (drwg)
BRYNNER, Irena *4/1:6-11 (28ils)
BUCHERT, Wilhelm exh rev. 4/1:48 W84 (il)
BUCHNER, Bill exh rev 4/4:53 F84
BUFFALO ART CRAFTS SHOP Illus: Candlestick (copper with enamel decoration); Jewel casket (enamel, copper). 4/3:23, 27 S84
BUNT, Catheleen *4/2:18-22 Sp84 (2ils)
BUSCH, Akiko Beyond the bench: production jewelers and how they survive. 4/1:24-27 W84 (9ils); Beyond the bench (part 2). 4/2:18-22 Sp84 (14ils); Deborah Aguado: a perceptualist's use of image and enigma in jewelry. 4/1:40-43 W84 (7ils)
BUSINESS practice See: Booth design; Production jewelers
BUSSELL, Dana Munya Avigail Upin: current work: Contemporary Crafts Association Gallery, Portland, OR. 4/1:47 W84 (il)
CHALICES See: The Ardagh chalice
CHAN, Kai Illus: Lily (body piece bamboo, thread); Neckpiece (red willow, wood, thread). 4/2:42 Sp84
CHANG, Missy Illus: Small container on base. 4/3:48 S84
CHERRY, Norman Illus: Rainbow with arrow pin. 4/4:44 F84
CHRISTENSEN, Hans *4/3:6-8 S84 (il)
CHURCH, Sharon Issues: some thoughts on international jewelry. (commentary). Deborah Norton. 4/4:61 F84
CLARK, Bryant *exh rev 4/3:36-9 S84 (5ils)
CLARK, Christine *exh rev 4/1:44 W84 (il); exh rev 4/3:53 S84
CODMAN, William C. *4/4:55-7 F84 (2ils)
COFFEE pots See: Alessi collection
COHN, Holly exh rev 4/3:53 F84
COLEMAN, Ken Objects d'art: Fashion Institute of Technology, New York City. 4/4:51 F84 (il)
COLEMAN, Ken, ed. The Ardagh chalice: a case history. Robert M. Organ. 4/2:-16 Sp84 (5ils; 6diags)
COLES, Thelma exh rev 4/3:53 S84; exh rev 4/4:49 F84
COLORING Reticulation and heat coloration of shakudo and shibuichi. Diane Egbert. 4/4:38-41 (8ils; 2charts)
COMPETITIONS See: Jewelry—Competitions; Johnson Matthey—Competition; SNAG—Competitions; Sterling Silversmiths Guild of America—Competitions
COMPUTERS as tools 4/1:17 W84
CONSTRUCTIVISM *exh rev 4/3:49 S84 (3ils)
COOGAN, Bob Illus: Herb knife (steel, satinwood). 4/4:53 F84
COOPER-HEWITT Museum, New York City—Symposium Virtuoso: a symposium. Bernard Bernstein. 4/3:54-5 S84 (il)
COPELAND, Elizabeth E. Illus: Casket (silver and enamel). 4/2:22
CRAVER, Margret 4/3:8 S84
CRAWFORD, Roland Master metalsmith: John Paul Miller. 4/4:22-5 F84 (7ils; por)
CROFT, Michael exh rev 4/4:52 F84
CROWLEY, Charles 4/3:10-11 S84 (il)
CUMMINGS, Angela *4/4:30-33 F84 (4ils; por)
DAMASCUS steel 4/1:14-15 W84 (ils)
DARTS—Exhibitions exh rev 4/4:51 F84 (il)
DeLARGE, Edward exh rev 4/3:53 S84
DePATTA, Margaret 4/3:40 S84
DePATTA, Margaret—Influence (Irena Brynner) 4/1:8 W84
DEREN, Edd 4/3:12-13 S84 (il)
DERREZ, Paul 4/4:10-11 F84
DeRUITER, Garret exh rev 4/4:52 F84 (il)
DESIGNERS: See: Architects as designers; Jewelry designers; Wilkinson, George
DESIGNERS, Finnish See: Weckström, Björn
DESIGNERS, Japanese—Exhibitions *4/4:52 F84 (il)
DEVLIN, Stuart *exh rev 4/2:39-40 Sp84 (2ils)
DIDUR, David exh rev 4/2:42 Sp84
DINEEN, Paula Jewelry, contemporary design and technique by Chuck Evans (bk rev). 4/2:45-6, Sp84; Wendy Ramshaw, retrospective: Westminster Gallery, Boston, MA. 4/3:46 S84 (2ils)
DIXON, Harry Illus: Sundial (copper). 4/3:44 S84
DOBLER, Georg Illus: Brooch (steel, brass, acrilacquer). 4/4:19 F84
DOUGLAS, Betsy All that glitters: von Grabill Gallery, Scottsdale AZ. 4/3:50 S84 (2ils)
DRUTT, Helen 4/4:9-10 F84
DUGGAN, Lynn exh rev 4/1:46 W84
DURANTE, Alfred, jt. author See: Palermo, Richard
DUSTS See: Wood dust
EBENDORF, Robert *exh rev 4/3:52 S84 (il)
EDUCATION—Summer programs 4/2:32-4 Sp84 (3ils)
EGAN, Melanie Illus: Bracelet (sterling silver, niobium). 4/2:44 Sp84
EGBERT, Diane Reticulation and heat coloration of shakudo and shibuichi. 4/4:38-41 F84 (8ils; 2charts); Illus: Sushi I pin; Sushi II pin (both reticulated shakudo); Walking pin; Shibuichi pin I (both reticulated shibuichi)
EIKERMAN, Alma 4/3:7-8 S84
ELECTRONIC jewelry John Pirtle. 4/1:17 W84
ENAMEL See: Plique-à-jour
ENAMEL—Exhibitions See: Kuhn, Belle & Roger
EQUIPMENT and tools Pumice finishing and brass wire brushing machine. 4/1:52 W84 (drwg); See also: Flexible shaft machines
EVANS, Chuck Jewelry, contemporary design and technique (bk rev). Paula Dineen. 4/2:45-6 Sp84
EVANS, James *exh rev 4/4:51 F84 (il); exh rev 4/2:42 Sp84 (3ils); Illus: Slate piece (brooch, twig, slate) 4/2:42 Sp84
EVENEPOEL, Anita exh rev 4/2:41 Sp84 (il)
EXHIBITIONS Architecture in silver: Max Protetch Gallery, New York City. Kurt Matzdorf. 4/2:36-8 Sp84 (7ils); Christine Clark and Dennis Leudeman: Merritt Gallery, Rochester, NY. William N. Mickle. 4/1:44 W84 (2ils); The cutting edge: the knifemaker's art: Edward H. Merrin Gallery of Antiquities: New York City. Marcia

Lewis. 4/4:52-3 F84 (il); 57th annual national high school art exhibition: Corcoran Gallery and School of Art, Washington, DC. 4/4:50 F84; Fourth annual selected university metalsmiths. Norman R. Eppink Art Gallery, Emporia State University, Emporia, KS. Gary Marsh. 4/3:48 S84 (4ils); Gorham: masterpieces in metal Museum of Art, Rhode Island School of Design, Providence. Tim McCreight. 4/4:55-7 F84 (5ils); Metals invitational exhibition: Southwest Texas State University, San Marcos. Tom Williams. 4/4:49 F84 (il); Metalwork:a national invitational exhibition: UAB Visual Arts Gallery, University of Alabama in Birmingham. Heather McPherson. 4/3:53 S84 (2ils); Objects d'art: Fashion Institute of Technology, New York City. Ken Coleman. 4/4:51 F84 (il); Statements in sterling/84: Lever House, New York City. 4/4:54 F84 (5ils); See also: Jewelry, American (Austrian, Belgian, Canadian, German, etc.)—Exhibitions

EXHIBITIONS, British The goldsmith & the grape: Goldsmiths' Hall, London. Marilyn Nicholson. 4/1:47 W84 (il)

EXHIBITIONS, Japanese Japanese designers in New York: Gallery 91, New York City. Pam Levine. 4/4:52 F84 (il)

EXHIBITIONS, Solo Carrie Adell: energies of transformation: Contemporary Artisans Gallery, San Francisco, CA. George McLean. 4/1:45 W84 (il); Belle & Roger Kuhn: new works: Plum Gallery, Kensingon, MD. Komelia Hongja Okim. 4/4:48 F84 (3ils); Betty Helen Longhi: new jewelry: Plum Gallery, Kensington, MD. Yvonne Arritt. 4/3:55 S84 (2ils); Charles Lewton-Brain: The Upstairs Gallery, Mount Saint-Vincent University, Halifax, NS. Vita Plume and Robert H. Anderson. 4/1:49 W84 (ils); Curtis LaFollette: topographical constructivism, sculpture, concrete poetry: Arthur B. Mazmanian Gallery, Framingham State College, Framingham, MA. Vincent Ferrini. 4/3:49 S84 (3ils); Gayle Saunders: Helen Drutt Gallery, Philadelphia, PA. Caroline Strieb. 4/2:41 Sp84 (il); James Evans: jewelry and small objects: Prime Canadian Crafts, Toronto. Anne Barros. 4/4:51 F84 (il); Janice Kluge: metalwork and sculpture: Birmingham Museum of Art, Birmingham, AL. Heather McPherson. 4/1:45 W84 (il); Joan Michlin: current metalsmithing: Creative Metalsmiths, Chapel Hill, NC. Lynda and Mark Baldridge. 4/1:49 W84 (il); John Marshall: Concepts Gallery, Carmel, CA. Walter Soellner. 4/2:39 Sp84 (il); Komelia Hongja Okim: Plum Gallery, Kensington, MD. Dalene Barry. 4/3:51 S84 (2ils); Lois Etherington Betteridge: Museum of Natural History, Ottawa, Canada. Suzanne Joubert. 4/3:47 S84 (2ils); M. Avigail Upin: current work: Contemporary Crafts Association Gallery, Portland, OR. Dana Bussell. 4/1:47 W84 (il); Natalie Paul, recent works: Venture Gallery, Lathrup Village, MI. Sally Rogers. 4/4:53 F84 (il); Randy Long: works in metal: Fine Arts Gallery, Indiana University, Bloomington, IN. Lynda LaRoche. 4/4:50 F84 (il); Samuel Yellin, metalworker: Federal Reserve Bank, New York City. Kathleen Nugent. 4/2:40 Sp84 (2ils); Stuart Devlin, retrospective exhibition: Goldsmiths' Hall, London. Marilyn Nicholson. 4/2:39-40 Sp84 (2ils); Wendy Ramshaw, retrospective: Westminster Gallery, Boston, MA. Paula Dineen. 4/3:46 S84 (2ils)

FENSTER, Fred Issues: some thoughts on international jewelry (commentary). Deborah Norton. 4/4:61 F84

FERRINI, Vincent Curtis LaFollette: topographic constructivism, sculpture, concrete poetry: Arthur B. Mazmanian Gallery, Framingham State College, Framingham, MA. 4/3:49 S84

FINEGOLD, Rupert Silversmithing by Rupert Finegold and William Seitz (bk rev). 4/2:46 Sp84

FINISHING—Technique Tools + techniques: pumice finishing and brass wire brushing (inc. instructions for constructing machine). Bernard Bernstein. 4/1:52 W84 (drwg)

FIRE-SCALE removal 4/1:52 W84 (drwg)

FISCH, Arline 4/4:10-11 F84

FISHER, Carol S. Master metalsmith: Robert von Neumann. 4/3:14-19 S84 (9ils; por)

FLEXIBLE shaft machines The flexible shaft machine: jewelry techniques by Harold O'Connor (bk rev). Randall Gunther. 4/4:59 F84

FLYNN, Pat exh rev 4/4:15 F84; Issues: some thoughts on international jewelry (commentary). Deborah Norton. 4/4:60-61 F84

FORMANEK, Verena Illus: Brooch (silver, steel, plastic). 4/1:50 W84

FORMANEK, Verena, jt. author See: Schwarzinger, Veronika

FORTUNE, Mark E. Illus: Teapot (silver) 4/4:54 F84

FRANÇOIS, Bernard exh rev 4/2:41 Sp84 (il)

FREDA, David exh rev 4/4:49 F84; exh rev 4/1:46 W84 (il)

FRIEDLICH, Don exh rev 4/4:13 F84 (il)

FROSH, Judy Illus: Necklace (gold and moonstones) 4/1:33 W84

FULLER, Betsy *4/2:18-22 Sp84 (3ils)

GABRIEL, Hannelore Die granulation by Jochem Wolters (bk rev). 4/4:59 F84

GALLERIES See: Appenzeller (Hans); Artwear; Beyond the bench: production jewelers and how they survive. Akiko Busch. 4/1:24-7 W84 (9ils); Beyond the bench (part 2). Akiko Busch. 4/2:18-22 Sp84 (14ils); The Goldsmiths studio and shop. Joan Mannheimer. 4/1:51 W84 (2ils); Metalsmithing as seen by gallery directors. Deborah Norton. 4/1:12-13 W84

GALLERY directors—Survey Metalsmithing as seen by gallery directors. Deborah Norton. 4/1:12-13 W84. Reply: Letters to the editor. Nilda C. Getty. 4/3:4 S84

GARRETT, Paula exh rev 4/4:49 F84

GARRISON, Elizabeth exh rev 4/1:46 W84 (il)

GAUDERNACK, Christian Illus: Brooch (sterling silver, niobium, diamond). 4/2:43 Sp84

GAUDI, Antonio—Influence (Irena Brynner) 4/1:10 W84

GEM setting Setting of gemstones by Walter Zeiss (bk rev). Tim McCreight. 4/4:59 F84

GERMANY A metalsmith's guide to Germany (jewelry stores, galleries, museums, exhibitions, studios, schools, suppliers). Ann Grundler. 4/1:28-31 W84 (ils)

GETTY, Nilda C. Letters to the editor: reply to "Metalsmithing as seen by gallery directors" (4/1:12-13 W84) 4/3:4 S84

GIBERSON, Dudley and Betsy exh rev 4/3:50 S84

GILES, Stuart exh rev 4/3:53 S84 (il)

GILSON, Sean* 4/2:18-22 Sp84 (2ils)

GLAZER, Cat Illus: Untitled (neckpiece, acrylic, glass paint, silver, stainless steel). 4/4:8 F84

GOLDMAN, Gail WGG: The Washington Guild of Goldsmiths. 4/1:32-5 W84 (2ils)

GOLDSMITHING See: Granulation

GOLDSMITHING, European—Symposia See: Cooper-Hewitt Museum, New York City—Symposium

GOLDSMITHING, Hellenistic See: The Artemis medallion

GOLDSMITHS Studio and Shop *4/1:51 W84 (2ils)

GOLDSMITHS, Australian — Exhibitions See: Devlin, Stuart

GORHAM Company, Providence, RI* 4/4:55-7 F84 (5ils)

GRAHAM, Anne Krohn Illus: Pelican (sterling silver stacking knife, fork and spoon) 4/1:34 W84; por: 4/2:33 Sp84

GRAHAM, Scott 4/1:12-13 W84

GRANULATION Die granulation by Jochem Wolters (bk rev). (text in German) Hannelore Gabriel. 4/4:59 F84

GRAVES, Michael exh rev 4/2:37 Sp84 (il)

GRIFFIN, Gary *4/1:16 W84

GROOVER, Jane exh rev 4/3:50 S84; exh rev 4/4:49 F84

GRUNDLER, Ann A metalsmith's guide to Germany. 4/1:28-31 W84 (ils)

HALL, Laurie exh rev 4/4:14, 15 F84 (il)

HAMLET, Susan exh rev 4/3:53 S84 (il); exh rev 4/4:13 F84 (il); Illus: Flexible column bracelet. 4/4:45 F84; Issues: some thoughts on international jewelry (commentary). Deborah Norton. 4/4:61 F84

HANDY & HARMAN WORKSHOPS 4/3:8 S84; 4/4:25 F84

HAYS, John Lee Illus: Pendant (gold, sterling silver, garnets). 4/3:50

HEALTH hazards—Consultation services 4/4:61-2 F84

HEALTH hazards—Manuals 4/3:56 W84

HEALTH hazards— Ozone from arcing in electric motors. 4/2:45 Sp84

HEALTH hazards— Wood dust (cocobola, redwood) 4/2:45 Sp84

HEINDL, Anna Illus: 3 "Head" brooches (silver, enamel) 4/1:50 W84

HIGBY, Wayne Review of "Young Americans: award winners" quoted. 4/4:10 F84

HILBERT, Therese Illus: Neckpiece (sterling silver coated wire). 4/4:16 F84

HINES, Kate *4/1:25-6 W84 (ils)

HOLLEIN, Hans exh rev 4/2:36, 38 Sp84 (2ils)

HOLLOWARE Hans Appenzeller: process made visible in elegant designs. Jabez L. van Cleef. 4/1:18-21 W84 (il; cover il)

HOLLOWARE, American American holloware: changing criteria. Jamie Bennett. 4/3:6-13 S84 (11ils; cover il); Reply: Letters to the editor. Helen Shirk. 4/4:4 F84

HOLLOWARE, American—Exhibitions See also: Long, Randy

HOLLOWARE, British—Exhibitions The goldsmith & the grape: Goldsmiths' Hall, London, England. Marilyn Nicholson. 4/1:47 W84 (il)

HOLLOWARE — Exhibitions Architecture in silver: Max Protetch Gallery, New York City. Kurt Matzdorf. 4/2:36-8 Sp84 (7ils)

HOPEA, Saara See Untracht, Saara Hopea

HORN, John E. Illus: Five-piece flatware place setting. (silver). 4/4:54 F84

HU, Mary Lee exh rev 4/4:49 F84

HUGHES, Mary exh rev 4/4:53 F84 (il)

HULL, Linda 4/3:11,13 S84 (il)

HUNTER, Dard Illus: Hanging lantern (copper with leaded glass) 4/3:25 S84

IRONWORK—Exhibitions See: Yellin, Samuel

ISAACSON, Ron 4/1:12-13 W84

ITOH, Kazuhiro Illus: Three brooches (granite, silver). 4/4:17 F84

JAGODA, Peter exh rev 4/4:53 F84

JAPANESE ALLOYS See: Shakudo; Shibuichi

JASEN, June exh rev 4/1:46 W84 (il)

JENCKS, Charles exh rev 4/2:37 Sp84

JEWELERS See also: Production jewelers

JEWELERS, American See: Aguado, Deborah; Brynner, Irena; Cummings, Angela; Miller, John Paul; Morris, Robert Lee; Noland, Susan; Radakovitch, Svetozar; Sampel, Jean

JEWELERS, American—Exhibitions See: Adell, Carrie; Ebendorf, Robert; Kuhn, Belle and Roger; Longhi, Betty Helen; Michlin, Joan; Okim, Komelia Hongja; Paul, Natalie; Ross, Ivy; Saunders, Gayle; Upin, Munya Avigail

JEWELERS, British—Exhibitions See: Wendy Ramshaw

JEWELERS, Canadian—Exhibitions See: Evans, James; Lewton-Brain, Charles

JEWELERS, Dutch See: Appenzeller, Hans; Derrez, Paul

JEWELERS, Finnish See: Weckström, Björn

JEWELRY—Competitions Feedback: judging the 1984 JM/SNAG platinum jewelry design competition. Ettagale Blauer. 4/4:44-7 F84 (10ils)

JEWELRY—Equipment & tools See: flexible shaft machines

JEWELRY—State of the art Jewelry USA. Linda Norden. 4/4:8-15 F84 (10ils; cover il); Issues: some thoughts on international jewelry (comments by Onno Boekhoud, Wendy Ramshaw, Pat Flynn, Susan Hamlet, Fred Fenster, Alf Ward, Sharon Church). Deborah Norton. 4/4:60-61 F84

JEWELRY—Trends Metalsmithing as seen by gallery directors. Deborah Norton. 4/1:12-13 W84; Letters to the editor: reply to "Metalsmithing as seen by gallery directors" (4/1:12-13 W84). Nilda C. Getty. 4/3:4 S84

JEWELRY, American—Exhibitions All that glitters: von Grabill Gallery, Scottsdale, AZ. Betsy Douglas. 4/3:50 S84 (2ils); Jewelry design: New York State artists: Herbert F. Johnson Museum of Art, Cornell University, Ithaca, NY. Deborah Norton. 4/1:46 W84 (il); The jewelry international exhibition: American Craft Museum, New York City. C. E. Licka. 4/4:16-21 F84 (9ils); Jewelry USA: American Craft Museum, New York City. Linda Norden. 4/4:8-15 F84 (11ils; cover il)

JEWELRY, Austrian—Exhibitions 5X Austrian jewelers: Gallery Spectrum, Munich. Veronika Schwarzinger and Verena Formanek. 4/1:50 W84 (ils)

JEWELRY, Belgian—Exhibitions Belgian jewels today: Inter-American Development Bank, Washington, DC. Gretchen Klunder Raber. 4/2:41 Sp84 (2ils)

JEWELRY, Canadian—Exhibitions Jewellery in transition: Prime Canadian Crafts, Toronto. James Evans. 4/2:42 Sp84 (3ils)

JEWELRY, German—Exhibitions German jewelry: freedom through precision: Contemporary Artisans Gallery, San Francisco, CA. Alan Revere. 4/1:48 W84 (ils)

JEWELRY design Deborah Aguado: a perceptualist's use of image and enigma in jewelry. Akiko Busch. 4/1:40-43 W84 (7ils); Jewelry, contemporary design and technique by Chuck Evans (bk rev). Paula Dineen. 4/2:45-6 Sp84; see also: Rendering

JEWELRY design—Competitions See: Jewelry-Competitions

JEWELRY designers See: Appenzeller, Hans; Cummings, Angela; Weckström, Björn

JEWELRY making The flexible shaft machine: jewelry techniques by Harold O'Connor (bk rev). Randall Gunther. 4/4:59 F84; Jewelry, contemporary design and technique by Chuck Evans (bk rev). Paula Dineen. 4/2:45-6 Sp84; See also: Gem setting; Goldsmithing; Wax modeling

JEWELRY making as a profession See: Business practice; Production jewelry

JOCZ, Daniel exh rev 4/4:13 F84 (il)

JOHNSON Matthey—Competition 4/4:44-7 F84 (10ils)

JOURET, Walter exh rev 4/2:41 Sp84

KALLENBERG, Lawrence Modeling in wax for jewelry and sculpture (bk rev). Bernard Bernstein. 4/2:46 Sp84

KEENS, David exh rev 4/4:49 F84

KIPP, Karl Illus: Hanging lantern (copper with leaded glass) 4/3:25 S84
KLUGE, Janice *exh rev 4/1:45 W84 (il)
KNIFESMITHS See: Baldwin, Phillip; Clark, Bryant
KNIVES—Exhibitions The cutting edge: the knifemaker's art: Edward H. Merrin Gallery of Antiquities, New York City. Marcia Lewis. 4/4:52-3 F84 (il)
KOEHL, Mary Illus: Brooch, sand and water series I. 4/3:48 S84
KOPLOS, Janet Electric plugs with forks & other ambiguous visions: Louise Norrell. 4/4:42-3, F84 (5ils)
KUHN, Belle and Roger *exh rev 4/4:48 F84 (3ils)
KUHN, Roger Illus: Brooch (sterling silver, enamel, ivory) 4/1:33 W84
KUMATA, Carol exh rev 4/3:53 S84; exh rev 4/4:49 F84
KUNZLI, Otto Illus: House (brooch, styrofoam, paper). 4/4:20 F84
LaFOLLETTE, Curtis *exh rev 4/3:49 S84 (3ils)
LaPLANTZ, David All that glitters: von Grabill Gallery, Scottsdale, AZ. Betsy Douglas. 4/3:50 S84 (il)
LaROCHE, Lynda Randy Long: works in metal: Fine Arts Gallery, Indiana University, Bloomington. 4/4:50 F84 (il)
LASKIN, Rebekah exh rev 4/4:13 F84 (il)
LETKI, Michael and Paula Illus: Pendant (sterling silver). 4/2:43 Sp84
LEUDEMAN, Dennis *exh rev 4/1:44 W84 (il)
LEUPP, Leslie Illus: Three bracelets (titanium, aluminum, steel). 4/4:12 F84
LEVINE, Pam *4/2:18-22 Sp84 (3ils); Japanese designers in New York: Gallery 91, New York City. 4/4:52 F84 (il)
LEWIS, Marcia The cutting edge: the knifemaker's art: Edward H. Merrin Gallery of Antiquities, New York City. 4/4:52-3 F84 (il); Introduction to "Master metalsmith: Svetozar Radakovich." Robert McDonald. 4/2:14-17 Sp84 (7ils; por)
LEWTON-BRAIN, Charles *exh rev 4/1:49 W84 (ils); Illus: Arctic pin (sterling silver, moonstone). 4/2:44 Sp84
LICKA, C.E. The jewelry international exhibition: observations and other border disputes: American Craft Museum, New York City. 4/4:16-21 F84 (9ils)
LONG, Randy 4/3:11 S84 (cover il); *4/4:50 F84 (il)
LONGHI, Betty Helen *exh rev 4/3:55 S84 2ils); Illus: Upward aspirations (shell-formed bronze sculpture). 4/1:33 W84
LONIER, Terri Form and function in booth design. 4/4:26-9 F84. (5ils: drwg)
LUTZ, Arthur Illus: Sculpture (aluminum, plexiglas). 4/3:44 S84
LYNN, Vanessa Robert Lee Morris: the business of marketing art jewelry. 4/3:28-31 S84 (4ils)
McCREIGHT, Tim Artpark 83 (personal narrative). 4/2:34-5 Sp84 (il); Gorham: masterpieces in metal (essay and exhibition review). 4/4:55-7 F84 (5ils); Jonathan Bonner: whimsy and vision. 4/2:28-31 Sp84 (4ils: cover il); Silversmithing by Rupert Finegold and William Seitz. (bk rev). 4/2:46 Sp84; Technical briefs: metals (physics of microstructure). 4/4:58-9 F84 (2drwgs)
MacDONALD, Grant Illus: Decanter. 4/1:47 W84
McDONALD, Robert Master metalsmith: Svetozar Radakovich. 4/2:14-17 Sp84 (7ils: por)
McLEAN, George Carrie Adell: energies of transformation: Contemporary Artisans Gallery, San Francisco, CA. 4/1:45 W84 (il); Illus: Necklace. 4/4:47 F84
MacNEIL, Linda exh rev 4/4:12-13 F84
McPHERSON, Heather Janice Kluge: metalwork and sculpture: Birmingham Museum of Art, Birmingham, AL. 4/1:45 W84 (il); Metalwork: a national invitational exhibition: UAB Visual Arts Gallery, University of Alabama in Birmingham. 4/3:53 S84 (2ils)
MACCHIARINI, Peter Illus: Brooch (copper, brass, silver). 4/3:45 S84
MAGNUSSEN, Erik 4/4:55-6 F84 (il)
MANNHEIMER, Joan The Goldsmiths studio and shop. 4/1:51 W84 (ils)
MARSH, Gary exh rev 4/3:48 S84 (4ils)
MARSHALL, John *exh rev 4/2:39 Sp84 (il)
MATZDORF, Kurt Architecture in silver: Max Protetch Gallery, New York City. 4/2:36-8 Sp84 (7ils); 4/3:7-11 S84 (il)
MEDALLIONS See: The Artemis medallion
MEIER, Richard exh rev 4/2:37 Sp84
MENDINI, Alessandro exh rev 4/2:36 Sp84
METCALF, Bruce exh rev 4/3:53 S84
METAL Arts Guild, San Francisco See: San Francisco Metal Arts Guild
METAL Arts Guild of Ontario, Toronto *4/2:43-4 Sp84 (5ils)
METAL spinning Metal spinning Part 3. James Seavey. 4/1:36-9 W84 (ils; drwgs)
METALS Technical briefs: metals (physics of microstructure). Tim McCreight. 4/4:58-9 F84 (2 drwgs)
METALSMITH (magazine) Index to issues 2/3-3/4 1982-3 compiled by Joanne Polster. 4/2:47-52 Sp84
METALSMITHING — History See: Arts and Crafts Movement
MICHLIN, Joan *exh rev 4/1:49 W84 (il)
MICKLE, William Christine Clark and Dennis Leudeman: Merritt Gallery, Rochester, NY. 4/1:44 W84 (2ils)
MILLER, Gayle P. Bryant Clark: the cutting edge of blade design. 4/3:36-9 S84 (5ils)
MILLER, Frederick A. 4/4:22-5 F84.
MILLER, John Paul exh rev 4/4:11-13 F84; *4/4:22-5 F84 (7ils; por)
MODELING See: Wax modeling
MOREY, Edgar exh rev 4/4:13 F84
MORRIS, Robert Lee *4/3:28-31 S84 (4ils); exh rev 4/4:14 F84; 4/1:12-13 W84
MORRIS, William 4/3:20-22 S84.
MUIR, Tom Illus: Earrings. 4/4:47 F84
MUNSTEINER, Bernd exh rev 4/1:48 W84 (il); 4/1:43 W84
NASMYTH, James 4/4:55-7 F84 (5ils)
NATIONAL Archaeological Museum, Athens—Collections Masterpiece in metal: the Artemis medallion. Anne Barros. 4/1:22-3 W84 (ils)
NEW YORK State—Jewelers—Exhibitions Jewelry design: New York State artists: Herbert F. Johnson Museum of Art, Cornell University, Ithaca, NY. Deborah Norton. 4/1:46 W84 (il)
NEWMARK, Ruth 4/1:12-13 W84
NICHOLSON, Marilyn The goldsmith and the grape: Goldsmiths' Hall, London. 4/1:47 W84 (il); Stuart Devlin, retrospective exhibition: Goldsmiths' Hall, London. 4/2:39-40 Sp84 (2ils)
NIKURA, Noriaki exh rev 4/4:52 F84 (il)
NIVOLA, Ruth exh rev 4/1:46 W84
NOLAND, Susan *4/1:51 W84 (il)
NORDEN, Linda Jewelry USA: American Craft Museum, New York City. 4/4:8-15 F84 (11ils; cover il)
NORRELL, Louise *4/4:42-3, F84 (5ils)
NORTON, Deborah The Arts & Crafts Movement and its influence on American metalwork. 4/3:20-27 S84 (7ils); Jewelry design: New York State artists: Herbert F. Johnson Museum of Art, Cornell University, Ithaca, NY. 4/1:46 W84. (il); Metalsmithing as seen by gallery directors. 4/1:12-13 W84
NUGENT, Kathleen Samuel Yellin, metalworker: Federal Reserve Bank, New York City. 4/2:40 Sp84 (2ils)
NUTTING, Jack Illus: Ring with interchangeable stone. 4/3:45 S84
OBITUARIES Untracht, Saara Hopea 4/4:6 F84
O'CONNOR, Harold The flexible shaft machine: jewelry techniques by Harold O'Connor (bk rev). Randall Gunther. 4/4:59 F84
OKIM, Komelia Hongja *exh rev 4/3:51 S84 (2ils); Belle and Roger Kuhn: new works: Plum Gallery, Kensington, MD. 4/4:48 F84 (3ils); Robert Ebendorf and Ivy Ross: finding the form: Craft and Folk Art Museum, Los Angeles, CA. 4/3:52 S84 (3ils)
ORGAN, Robert M. The Ardagh chalice: a case history. 4/2:6-16 Sp84 (5ils; 6 diags)
ORGANIZATIONS: See: Metal Arts Guild of Ontario; San Francisco Metal Arts Guild; SNAG; The Washington Guild of Goldsmiths, Washington, DC
OZONE—Health hazards 4/2:45 Sp84
PALERMO, Richard Rendering: design and process. Richard Palermo and Alfred Durante. 4/2:23-7 Sp84 (13drwgs)
PAUL, Natalie *exh rev *4/4:53 F84 (il)
PERRET, Etienne *4/1:24 W84 (ils); 4/1:12-13 W84
PETERS, Laurie exh rev 4/3:50 S84 (il)
PHOTOETCHING Photographic images on refractory metals. Marilyn Shaw. 4/3:32-5 S84 (2ils)
PHOTOTRANSFER See: Photoetching
PIERCE, Mark *4/1:24, 27 W84 (ils)
PIRTLE, John *4/1:17 W84 (por)
PLATINUM—Exhibitions Feedback: judging the 1984 JM/SNAG platinum jewelry design competition. Ettagale Blauer. 4/4:44-7 F84 (10ils)
PLIQUE-à-jour The Goldsmiths studio and shop. Joan Mannheimer. 4/1:51 W84 (ils)
PLUME, Vita Charles Lewton-Brain: The Upstairs Gallery, Mount Saint Vincent University, Halifax, NS. Vita Plume and Robert H. Anderson. 4/1:49 W84 (ils)
POLK, Randy and Janie exh rev 4/3:50 S84
POLSTER, Joanne *Metalsmith* index to issues 2/3-3/4 1982-3. 4/2:47-52 Sp84
PORTOGHESI, Paolo exh rev 4/2:36 Sp84
POTTER, Elaine 4/1:12-13 W84
PRILLAMAN, Richard Illus: Untitled dart (wood, brass, silver, steel). 4/4:51 F84
PRIP, Janet 4/3:11 S84
PRIP, John 4/3:7-8 S84 (2ils)
PRODUCTION jewelers Beyond the bench: production jewelers and how they survive (Etienne Perret, Mark Pierce, Laurence Seegers, Kate Hines, Deborah Fine Yohai). Akiko Busch. 4/1:24-7 W84 (9ils); Beyond the bench; part 2 (Cathleen Bunt, Betsy Fuller, Jan Yager, Pam Levine, Sean Gilson). Akiko Busch. 4/2:18-22 Sp84 (14ils); The Goldsmiths studio and shop (Susan Noland and Jean Sampel). Joan Mannheimer. 4/1:51 W84 (2ils); see also: Appenzeller, Hans; Cummings, Angela; Morris, Robert Lee; Weckström, Björn
PUMICE finishing 4/1:52 W84 (drwg)
QUIGLEY, Robin Illus: Bracelet with gold-tipped fringe (sterling silver, gold, copper). 4/4:11 F84; 4/3:6, 11 S84 (il)
QUINN, Kay White Illus: Sea treasure (container, pewter, shell). 4/3:43 S84
RABER, Gretchen Klunder Illus: Brooch (sterling silver, gold, tourmaline) 4/1:35 W84; Belgian jewels today: Inter-American Development Bank, Washington, DC. 4/2:41 Sp84 (2ils); WGG: The Washington Guild of Goldsmiths. Gail Goldman. 4/1:32 W84
RADAKOVICH, Svetozar *4/2:14-17 Sp84 (7ils; por)
RAMSHAW, Wendy *exh rev 4/3:46 S84 (2ils); Issues: some thoughts on international jewelry. (commentary). Deborah Norton. 4/4:60 F84; Saara Hopea-Untracht 1925-1984 (obit.). 4/4:6 F84 (por)
REED, Vernon exh rev 4/4:49 F84
RENDERING Rendering: design and process. Richard Palermo and Alfred Durante. 4/2:23-7 Sp84 (13drwgs)
RENK, Merry Illus: Pyramids (flexible hairband, silver) 4/3:40 S84; The San Francisco Metal Arts Guild yesterday and today. Merry Renk and Carrie Adell. 4/3:40-45 S84 (12ils)
RETICULATION Reticulation and heat coloration of shakudo and shibuichi. Diane Egbert. 4/4:38-41 F84 (8ils; 2 charts)
REVERE, Alan German jewelry: freedom through precision. Contemporary Artisans Gallery, San Francisco, CA. 4/1:48 W84 (ils)
REZAK, Suzan Illus: Brooch (sterling silver). 4/4:17 F84
RIES, Victor Illus: Candlestick (oxydized brass). 4/3:43 S84
RITUAL vessels See: The Ardagh chalice
ROBBINS, Sybil 4/1:12-13 W84
ROGERS, Sally Natalie Paul: recent works: Venture Gallery, Lathrup Village, MI. 4/4:53 F84 (il)
ROSS, Ivy *exh rev 4/3:52 S84 (2ils)
ROSSI, Aldo exh rev 4/2:36-7 Sp84 (il)
ROYCROFT community 4/3:24 S84 (il)
SAMPEL, Jean *4/1:51 W84 (il)
SAN FRANCISCO Metal Arts Guild *4/3:40-45 S84 (12ils); 4/1:8 W84
SANFORD, Claire Illus: Untitled vessel. 4/3:48
SAUNDERS, Gayle *exh rev 4/2:41 Sp84 (il)
SCHAFRAN, Hermann exh rev 4/1:48 W84 (il)
SCHNEIDER, Julie Master metalsmith: Irena Brynner (taped interview). 4/1:6-11 W84 (28ils)
SCHOEMER, Britta Illus: Pendant (sterling silver, gold, garnet, diamond) 4/3:41 S84
SCHOOL for American Craftsmen/R.I.T. —History 4/3:7 S84
SCHWARZINGER, Veronika Illus: Earring (glass, steel). 4/1:3 W84; 5X Austrian jewelers: Gallery Spectrum, Munich, Veronika Schwarzinger and Verena Formanek. 4/1:50 W84 (ils)
SCULPTURE — Exhibitions See: Clark, Christine; LaFollette, Curtis; Leudeman, Dennis; Kluge, Janice; Marshall, John
SEAVEY, James Metal spinning Part 3. 4/1:36-9 W84 (ils; drwgs)
SEEGERS, Laurence *4/1:25-6 W84 (ils)
SEITZ, William jt. author See: Finegold, Rupert
SHAKUDO Reticulation and heat coloration of shakudo and shibuichi. Diane Egbert. 4/4:38-41 F84 (8ils; 2 charts)
SHAW, Marilyn Photographic images on refractory metals. 4/3:32-5 S84 (2ils); Illus: My brother and me (necklace, columbium, plastic); Didn't things look larger when you were smaller (sterling silver, titanium, plastic). 4/3:32, 34 S84
SHAWN, Beverly exh rev 4/4:52 F84
SHIBUICHI Reticulation and heat coloration of shakudo and shibuichi. Diane Egbert. 4/4:38-41 F84 (8ils; 2 charts)
SHIRK, Helen 4/3:9-10 S84 (il); Letters to the editor: reply to "American holloware" (4/3:6-13 S84). 4/4:4 F84
SILVER Technical briefs: metals (physics of microstructure) Tim McCreight. 4/4:58-9 F84 (2 drwgs)
SILVERSMITHING—Exhibitions Architecture in silver: Max Protetch Gallery, New York City. Kurt Matzdorf. 4/2:36-8 Sp84 (7ils); Gorham: masterpieces in metal: Museum of Art, Rhode Island School of Design, Providence. Tim McCreight. 4/4:55-7 F84 (5ils); Statements in sterling/84: Lever House, New York City. 4/4:54 F84 (5ils)
SILVERSMITHING—History American holloware: changing criteria. Jamie Bennett. 4/3:6-13 S84 (11ils; cover il); Gorham: masterpieces in metal. Tim

McCreight. 4/4:55-6 F84 (5ils)
SILVERSMITHING—Technique Silversmithing by Rupert Finegold and William Seitz. (bk rev) Tim McCreight. 4/2:46 Sp84
SILVERSMITHING, British—Exhibitions The goldsmith & the grape: Goldsmiths' Hall, London, England. Marilyn Nicholson. 4/1:47 W84 (il)
SILVERSMITHS, Canadian—Exhibitions See: Betteridge, Lois Etherington
SILVERWORK, Irish See: The Ardagh chalice
SKUBIC, Peter Illus: Brooch (steel). 4/1:50 W84
SLIVKA, Rose Review of "New departures in jewelry" quoted. 4/4:9-10 F84
SNAG Comments by Robert von Nuemann. 4/3:17 S84
SNAG—Competitions Feedback: judging the 1984 JM/SNAG platinum jewelry design competition. Ettagale Blauer. 4/4:44-7 F84 (10ils)
SOCIETY OF NORTH AMERICAN GOLDSMITHS See: SNAG
SOELLNER, Walter 4/1:12 W84; John Marshall: Concepts Gallery, Carmel, CA 4/2:39 Sp84 (il)
SON, Kye-yeon Illus: Liquor decanter with four cups (silver). 4/4:54 F84
STARK, Debra Illus: Ripple with spine earrings. 4/4:46 F84
STATHATOS (Helene)—Collection See: National Archaeologial Museum, Athens—Collections
STEAKLEY, Douglas 4/1:12-13 W84; exh rev 4/4:49 F84
STERLING Silversmiths Guild of America—Competition exh rev 4/4:54 F84 (5 ils); 4/3:9 S84
STICKLEY, Gustav 4/3:22-4 S84
STRIEB, Caroline exh rev 4/4:12 F84; Gayle Saunders: Helen Drutt Gallery, Philadelphia, PA. 4/2:41 Sp84 (il)
STUDENT work—Exhibitions 57th annual national high school art exhibition: Corcoran Gallery and School of Art, Washington, DC. 4/4:50 F84; Fourth annual selected university metalsmiths: Herman R. Eppink Art Gallery, Emporia State University, Emporia, KS. Gary Marsh. 4/3:48 S84 (4ils)
SULLIVAN, Jack Por: artist at work. 4/2:44 Sp84
SUMMER programs See: Education—Summer programs
SYMPOSIA See: Cooper-Hewitt Museum, New York City—Symposium
TEAPOTS See: The Alessi collection
THATCHER, Becky Illus: Crab brooch I (silver, gold, pearls) 4/1:35 W84
THOMAS, Richard 4/3:7 S84
THREADGILL, Linda exh rev 4/3:53 S84
THROWER, Christine Illus: Penannular (sterling silver pin) 4/1:35 W84
TIFFANY, William Comfort 4/3:21-6 S84 (il)
TIGERMAN, Stanley exh rev 4/2:37 Sp84
TISDALE, David Illus: Rectangular bracelet (aluminum, gold, mosaic stone). 4/4:14 F84
TOM, Michael exh rev 4/4:49 F84 (il)
TOOLS Tools of the trade (statements by Phillip Baldwin, Gary Griffin, James Wallace, James Pirtle). William Ard. 4/1:14-17 W84 (6ils; pors)
TRAINS as theme 4/1:40-43 W84
TUNIS, Roslyn Letters to the editor: reply to "Ancient inspirations/contemporary interpretations" (3/3:31 S83). 4/1:4 W84
TUSQUETS, Oscar exh rev 4/2:46-7 Sp84 (2ils)
ULLRICH, Klaus exh rev 4/1:48 W84 (il)
UNTRACHT, Saara Hopea Obit. Wendy Ramshaw. 4/4:6 F84 (por)
UOZUMI, Sachiko exh rev 4/4:13 F84 (cover il)
UPIN, Munya Avigall *exh rev 4/1:47 W84 (il)
VALLANCE, Aymer 4/3:22 S84
van Arsdale, Dorothy Master metalsmith, Irena Brynner (taped interview). 4/1:6-11 W84 (28ils)
van CLEEF, Jabez L. A conversation with Angela Cummings. 4/4:30-33 F84 (4ils; por); Hans Appenzeller: process made visible in elegant designs. 4/1:18-21 W84 (8ils; cover il)
van HEDDEGEM, Dominique exh rev 4/2:41 Sp84
VENTURI, Robert exh rev 4/2:37 Sp84
VIERTHALER, Arthur—Influence (Robert von Neumann). 4/3:15 S84
VIGELAND, Tone Illus: Necklace (steel, sterling silver, gold, mother of pearl). 4/4:19 F84
von FLEMING, Eric—Influence (John Paul Miller). 4/4:25 F84
von NEUMANN, Robert *4/3:14-19 S84 (9 ils; por)
WAGLE, Kate exh rev 4/3:53 S84
WALLACE, James *4/1:16-17 W84
WARD, Alf Illus: Fan brooch. 4/4:46 F84; Issues: some thoughts on international jewelry (commentary). Deborah Norton. 4/4:61 F84
WASHINGTON Guild of Goldsmiths, Washington, DC *4/1:32-5 W84 (8ils)
WATSON, Kate exh rev 4/3:50 S84
WATSON-ABBOTT, Lynda Illus: Brooch. 4/4:45 F84; exh rev 4/3:50 S84
WAX modeling Modeling in wax for jewelry and sculpture by Lawrence Kallenberg (bk rev). Bernard Bernstein. 4/2:46 Sp84
WEATHERVANES See: Bonner, Johnathan
WECKSTRÖM, Björn *4/4:34-7 F84 (8ils; por)
WEISS-Edwards, Linda Health hazards, questions & answers: dangers of wood dusts (cocobola, redwood), ozone from arcing in electric motors. 4/2:45 Sp84; List of onsite consultation services for health and safety hazards. 4/4:61-2 F84; Manuals on health hazards. 4/3:56 S84
WELLES, Clara Barck 4/3:26 S84 (il)
WERGER, Paulette Illus: Fishing memories I. 4/3:48 S84
WESEL, Claude exh rev 4/2:41 Sp84
WILLIAMS, Heather Illus: Hand mirror (silver). 4/4:54 F84; Pea pod earrings. 4/4:47 F84
WILLIAMS, Tom Metals invitational exhibition: Southwest Texas State University, San Marcos. 4/4:49 F84 (il)
WINE as theme The goldsmith and the grape: Goldsmiths' Hall, London, Marilyn Nicholson. 4/1:47 W84 (il)
WOLTERS, Jochem Die granulation by Jochem Wolters (bk rev). (text in German). Hannelore Gabriel. 4/4:59 F84
WOOD dust—Health hazards 4/2:45 Sp84
YAGER, Jan *4/2:18-22 Sp84 (4ils)
YAMASHITA, Kazumasa exh rev 4/2:38 Sp84 (2ils)
YELLIN, Samuel *exh rev 4/2:40 Sp84 (2ils)
YOHAI, Deborah Fine *4/1:25-7 W84 (ils)
YOUNG, Sara exh rev 4/4:12-13 F84
YVREN, Armonita Illus: Sugar spoon. 4/3:43 S84
ZAREMSKI, Tomasz Illus: Town (bracelet, silver, copper, niello) 4/4:18 F84
ZEISS, Walter Setting of gemstones by Walter Zeiss (bk rev). Tim McCreight. 4/4:59 F84

TECHNICAL BRIEFS

Technical Briefs
Acids
by Tim McCreight

Dear Tim:
I've been making jewelry for several years and have most recently been doing a lot of etching. Though I can usually get acceptable results through trial and error, I'd like to have a clearer understanding of how acids work.

The relationship between various acids and metals defies simple explanation. If the chemists in the audience will bear with me, I'll offer a simplified version of common studio situations.

Acids are hydrogen compounds that give rise to hydrogen ions (H+) in an aqueous solution. The strength of the acid is relative to the concentration of these ions. These combine with water to make H_3O+, an active ion called the *hydronium ion.* In many cases, it is this ion that creates the bite, or cuts into the metal.

You may have noticed that a strong concentration of nitric acid cuts more slowly than a diluted one. This is because water is needed to convert the hydrogen ions (H+) into hydronium ions (H_3O+). The exact proportions needed for each etching will depend on several factors, including the metal, the temperature and age of the solution, and whether the solution has been exposed to sunlight. A popular concentration for etching on sterling is 25% reagent-grade nitric to 75% water. Note that reagent-grade nitric, when purchased, is approximately 30% water.

Acids will pick up moisture from the air unless tightly sealed. If the mixture was concentrated, the absorption of moisture would make the acid more corrosive. If it had already been diluted, the addition of water will decrease the percentage of hydronium ions and weaken the action of the acid.

The reaction of nitric acid on silver is written thus:

$$3Ag + 4HNO_3 \rightarrow 3AgNO_3 + 2H_20 + NO \uparrow$$

The NO (nitric oxide) is a colorless, poisonous gas that quickly combines with oxygen from the air around it to form NO_2, a yellowish-brown, odorous, poisonous gas. This is the stuff you've seen coming off your etching bath, or out of the mouth of your jar of used acid.

Remember, ALWAYS ADD THE ACID TO THE WATER. This prevents possible splattering that can be caused by a violent reaction on the surface of the acid. A great deal of heat is produced by the reaction of acid to water. If this heat is given to a small amount of water on the surface of the acid, the result can be a boiling action that might cause the acid to splatter. By pouring the heavier liquid, the acid, into the water, the solution will mix itself at the bottom of the water. With a large quantity of water present to absorb heat, the risk of splattering is greatly reduced.

For etching copper and brass, many metalsmiths use ferric chloride. It seems milder than nitric acid and, on those metals, gives a cleaner, deeper bite. Is it an acid? Yes, but only incidental to its reaction with copper and brass. When ferric chloride is mixed with water and in contact with copper, the following reaction takes place:

$$2FeCl_3 + Cu \rightarrow 2FeCl_2 + CuCl_2$$

In this reaction, the ferric chloride is reduced to ferrous chloride, while the copper metal is oxidized, forming cupric chloride. The products of this reaction are both water-soluble and can therefore be rinsed away. Ferric chloride is not strong enough to similarly oxidize silver, or silver alloys, so the more powerful nitric acid must be used.

The opposite of acids are *bases.* These compounds are characterized by a negatively charged hydroxide ion (OH−), that contains one oxygen and one hydrogen atom. A base will neutralize an acid because the H+ of the acid combines with the OH− of the base to create water, H_2O. The only trick in this neutralization is to be sure that you have a balanced number of the H+ and OH− from these compounds. Familiar bases are baking soda or lime, and these should be kept within easy reach when working with acids.

Send questions for this column (double-spaced, typewritten) to: Tim McCreight, 23 Mill Road Circle, Boylston, MA 01505.

BOOKS

The New Jewelry: Trends & Traditions
by Peter Dormer & Ralph Turner
Thames and Hudson, New York, 1985.
192 pages, 115 color and 116 b/w illustrations. $35

It has been almost 10 years since the publication of Ralph Turner's now classic volume *Contemporary Jewelry: A Critical Assessment 1945–1975.* The arrival of this new book, then, has been long awaited. Although coauthored and only thematically linked to the former, *The New Jewelry* will inevitably be viewed as a companion volume. Further, it is a survey of the decade 1975–1985 and therefore conveniently picks up where the first book left off. While comparisons can be made, *The New Jewelry* is most definitely not a volume 2. It has a different organization, attitude and approach, as well as two intelligences, not one, at work.

The division of labour, at least as regards the text, is made clear—Ralph Turner wrote the introductory historical essay, "A Distinctive Signature," while Peter Dormer authored the other three sections, which are organized thematically into what he perceives as three dominant schools of contemporary making: mainstream expressionist, mainstream figurative and radical departures.

While this is the most important book to be published on the subject since 1976, it is also the only attempt since to seriously document this area. It therefore will have wide representation in libraries both public and private, and will, like its predecessor, no doubt, eventually go out of print and become a collector's item. It deserves much success.

This is not to say, however, that it is unflawed. For one thing, the illustrations while of a uniformly excellent quality, and providing a comprehensive visual assessment of the decade's activities, are sometimes unusually chosen. Why, for example, use Hubertus von Skal's works of 1972 (which already appeared in *Contemporary Jewelry),* or why allot two colour pages to the "Fancy Goods" collection?

The layout of the pieces are usually exemplary, but there are lapses. In Illustration 64 (plates lack page numbers) we see the works of three artists—Cathy Harris, Louise Slater and Paul Derrez—all piled onto the page like a jewelry boutique window display, too congested for full appreciation.

Of larger concern, however, is that there is so little space for text—of 192 pages—only 39 are allocated to writing. More can and needs to be discussed when dealing with this work. In contrast, *Contemporary Jewelry* had 102 pages of text plus 24 pages of artists' statements in a 208 page book. This restriction (was it the publisher's?) appears to have seriously hampered Dormer's ability to amplify his viewpoints and apply his critical intelligence. While I have always felt that Dormer is an able and articulate voice in the field, he seems too constrained, having to make too many generalizations. Not enough theoretical and cultural contexts are invoked for this large and formidable subject. This is not to say that contentious attitudes, critical stances and significant statements are not brought to bear, only that one longs for a more closely argued position and a more focussed and sustained attitude. Dormer charted some of the ground from which a more intense discussion might have taken place in his fine article, "There's a Critic in My Tea" in *Crafts* (March/April 1983, p. 16).

As mentioned, however, there are moments of fine writing with great clarity and concision. On the subject of the seeming spontaneity and ease of Hermann Junger's work: "Spontaneity in this context is no random or uncontrolled gesture, but a fluency of expression which demands at least two ingredients—a skill, a dexterity, which is more or less second nature and is a natural tool to the maker's imagination; and a clear idea of where the design could go."

He also raises an astute and provocative issue while discussing Pierre Degen's recent work: "To do this Degen has had to work on the large scale; it confirms the view expressed earlier that one of the limitations which keeps jewelry to an

essentially decorative function is its literal lack of physical space in which to create gesture and develop metaphor."

On the other hand, I found that the substantial discussion of David LaPlantz as a personification of the quintessential American sensibility (an "Ur-American") to be quite unconvincing and rather gratuitous. Equally dubious was the statement that "David Tisdale's work is characteristically American in that it can stand as autonomous ornament" in comparison to European work.

Ralph Turner's historical overview is instructive and updates his larger coverage of the subject in his first book. Both texts ought to be required reading for all jewellery (British spelling, curiously not used in the book) students and those interested in the field. It was gratifying to note the growth and development of artists who still command attention for their continuing relevant contributions: Susanna Heron, Pierre Degen, Otto Künzli, David Watkins, Marion Herbst, for example, or, on the other hand, to wonder at those who did not fulfill early promise or simply were missing: John Plenderleith, Claus Bury (abandoned jewellery), Robert Smit (only recently re-surfaced), Sergi Aguilar, etc., and finally, the sad notes, those no longer with us, like Reinhold Reiling and Emmy van Leersum.

Turner's conclusion is accurate and insightful: "To date, the new jewelry has had an adventurous time and the last 10 years have been very exciting. Now there is a certain familiarity creeping into the work; cliches are not just the Achilles heel of commercial jewelry. When someone does a critical survey of jewelry and ornament in the early 1990's, he or she will probably be looking enthusiastically at a much wider group of countries." At that time, you will be able to pull out your well-thumbed copy of *The New Jewelry* and make profitable and interesting comparisons to this very active and significant decade.
—James Evans

Engine Turning 1680–1980: The Tools & Technique
by Martin Mathews
41 Greenhill Road,
Otford, Seven Oaks
Kent TN 14 5 RR, England
1984, £35 (plus postage)

This book is the only current source dealing exclusively with the Rose Engine engraving process. The author gives a detailed description of the techniques by which an engine-turned or guilloche surface is created.

The operation of both the Rose engine and straight-line machine are explained including types of patterns produced, checking of the work, shaping of the cutter, use of Guider to control the cut and type of rubbers used in the rosettes. A brief history of engine turning applied to security printing is included as well as the design and construction of a geometric chuck.

The volume is well illustrated throughout with clear drawings and photographs of the process and machines discussed. It can assist you in understanding the process which creates a guilloche surface. Should you wish to employ this type of surface enrichment and do not have a machine available, you could employ the services of a professional in this field.
—Kener Bond

The Jewelers Craft
by Jaime Pelissier
Van Nostrand Reinhold
1981, 107 pages, $12.95

The jacket notes advertise "a workshop manual with step-by step 'skill-building' exercises in traditional technical skills." It's a great idea, and one that deserves to find its way into print. Not everyone has the constitution to follow the demanding regimen of self-instruction, yet those students of independent mind and comparable aptitude should have a book to guide their progress.

The inherent difficulty in such a book is deciding the level of instruction. Pelissier avoids the common trap of emphasizing beginning techniques that mire the student at the introductory level. My complaint is that he swings too far in the opposite direction, assuming too much skill on the part of the reader. His instructions are so brief that I found myself rereading sections several times still uncertain of how to proceed. There are those who would overcome this difficulty, but I fear for the many who would give up in frustration.

In short order (the entire book is a paltry 107 pages) the reader is led through layout, piercing, scoring, filing, box construction, hingemaking, bezel and crown construction, channel setting and sophisticated findings. Pelissier is obviously an accomplished goldsmith and speaks with confidence on each of these topics. But to fit so much instruction in so small a space, many details had to be omitted and I think the book suffers as a result. I would have preferred fewer projects with greater attention given to specific instructions on placement of solder, sequence of operations and so on.

This book is intended to be a do-it-yourself manual, and for those who can overcome the brevity of the descriptions, it will be serviceable. But let the faint-of-heart beware.
—Tim McCreight

The Goodfellow Catalog of Wonderful Things:
For Home & Office,
296 pages
To Wear & Wear & Wear,
224 pages
For Kids of All Ages,
196 pages
Gifts Under $50,
224 pages
by Goodfellow Catalog Press, Inc., Editor-in-Chief: Christopher Weills, Chilton Book Co., Radnor, PA. Available from: Goodfellow Catalog Press, Box 4520, Berkeley, CA 94704. Each catalog is $12.95 paperback, plus $2.25 shipping.

Having reviewed *The Goodfellow Catalog of Wonderful Things No. 3* in the Summer 82 issue of *Metalsmith*, I readily agreed to review the current anthology. The new catalog has taken on a different format; it is no longer bound into one large volume weighing "three-and-a-half pounds" (as quoted by the editor), but has become four separate publications. Of course, this aids purchasers by enabling them quick reference to the different categories and is easily managed, but, on the other hand, this new format foregoes a certain charm. Also, monetarily the set costs a lot more (*No. 3* was $19.95).

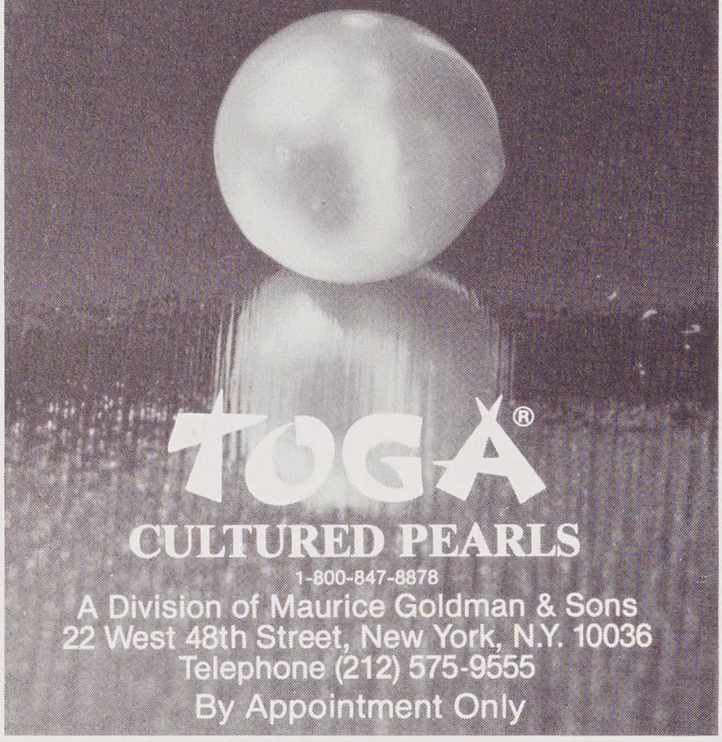
The original intent is still there—to present a diverse mail order treasury of America's finest craft so that people may use art in their everyday lives. The catalogs, being what they are, offer the curious, the enthusiast, the buyer, a comprehensive selection of craftwork, be it wearable, usable or just decorative. Of course, by splitting the categories into separate catalogs, the busy office manager does not have to plunge through hundreds of pages to find that special set of stoneware coffee cups for the boardroom. This alone makes a more salable publication.

I still enjoy the biographical material and the photographs of the craftsmen. One can forget that some are a little out of focus and obviously shot by a happy customer or family member. Somehow knowing that the maker of the holloware pitcher is a real person, and she has a favorite animal to share her life, or perhaps a couple of cuddly kids and a husband, gives the publication a real personal touch. It portrays the feeling you are actually buying from these people in person, and not from some glossy mail order corporation with a 24-hour toll-free number.

So, the good fellows at Goodfellow have done it again. They have successfully continued their striving for diversity and excellence without losing that unsophisticated friendliness and warmth for which most craftsmen stand. Once again, I personally feel the catalogs rank as references to the craft scene in the USA, making them valuable records. Here we find not the extraordinary—the highly competitive exhibit pieces stretched to current esthetic boundaries—but what is salable, usable and the perfect alternative to mass production.
—Glenice Lesley Matthews

Loose Cultured Pearls

In all sizes of loose pearls—round, baroque, fresh water pearls (BIWA pearls), South Sea pearls, singles and pairs.



TOGA®

CULTURED PEARLS

1-800-847-8878

A Division of Maurice Goldman & Sons
22 West 48th Street, New York, N.Y. 10036
Telephone (212) 575-9555
By Appointment Only

In the next issue

Sam Kramer

The Platinum Competition

The Future of Crafts?
Haystack and Penland Colloquiums

Stainless Steel Jewelry

and more

Over the last 50 years, C. R. Hill Company has become the source for tools and supplies, including those hard-to-find items, for Jewelers, Metalsmiths, Casters, Designers, Silversmiths, Enamelists and Schools.

Tools/Supplies

JEWELRY • CASTING • METALSMITHING • ENAMELS
GOLD/SILVERSMITH SUPPLIES
CATALOG AVAILABLE

C.R. HILL

2734 W. 11 Mile Road • Dept M • Berkley, Michigan 48072
In Michigan **(313) 543-1555** Outside Michigan **(800) 521-1221**

GIVE METALSMITH
AS A GIFT
AND BE REMEMBERED
ALL YEAR ROUND

Metalsmith Subscribe To

Reviews, esthetics, criticism, profiles, surveys, essays.

Written by contributors from all parts of the craft world.

Contemporary work of leading jewelers, designers, gold- and silversmiths, enamelers, blacksmiths, and sculptors.

Recent gallery and museum exhibitions.

Current work in diamonds, ivory, gold, silver, titanium, plastics . . .

Surveys of museum collections around the world.

Please limit information below to boxes provided.

Please enter my subscription
$20 ☐ United States, Canada, & Foreign Subscriptions One year (4 issues)
Foreign Subscriptions add:
$6 ☐ Surface mail
$10 ☐ Air Mail, Mexico
$15 ☐ Air Mail: South America/Europe
$20 ☐ Air Mail: Asia/Australia
☐ Amount Enclosed
☐ Please bill me

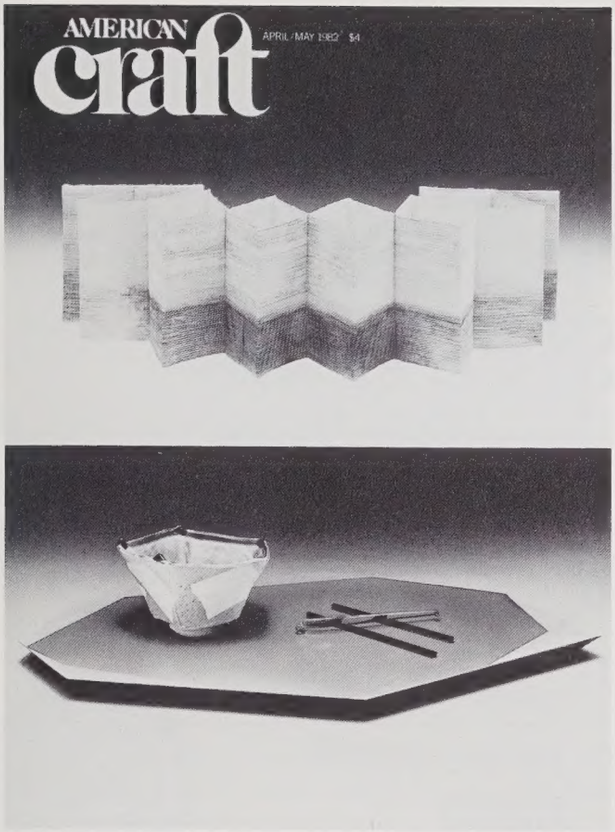
Make all checks (in U.S. funds only) payable to **Metalsmith**.
Mail to:
Metalsmith, Dept. MM,
Society of
North American Goldsmiths,
6707 N. Santa Monica Blvd.
Milwaukee, WI 53217

Name

Address

City State/Zip

Telephone



AMERICAN CRAFT puts you in touch with contemporary crafts.

Richly illustrated, each bimonthly issue presents distinguished master craftsmen and new talent, museum and gallery exhibitions across the country, historical and international subjects, book reviews, news of the field and a national calendar.

AMERICAN CRAFT is one of the benefits of membership in the American Craft Council, the leading organization for crafts in the United States.

RECEIVE ONE FREE ISSUE PLUS
ONE-YEAR SUBSCRIPTION WITH THIS COUPON

Annual Dues: $35 ($40 per year outside the U.S.)
$27 to students with copy of current official student I.D.

Please enter my membership in the American Craft Council which includes a one-year subscription to AMERICAN CRAFT.

Name _____

Street _____

City _____ State _____ Zip _____

Amount enclosed $ _____

Contributions are deductible within legal limits for tax purposes. Make all checks in U.S. funds payable to ACC. Allow 6-8 weeks to receive your first copy of AMERICAN CRAFT.

Mail this form with payment to: **American Craft Council**
P.O. Box 1308-CL,
Fort Lee, NJ 07024

9M34

C.W. Somers & Co., Inc.

Jewelers Supplies of All Kinds

Findings, Tools, Metals, Semi-Precious and Synthetic Stones

Send for FREE catalog

C.W. Somers & Co., Inc.
387 Washington Street
Boston MA 02108

Phone (617) 426-6880
in Mass 1-800-462-8803

photography by William Thuss

© 1985 T. Michaels

from the innovators:
14KT and diamonds for men

thomas michaels
designers

22 main street, camden, me 04843 / 1-207-236-2708

SNAG Book Dept

Society of North American Goldsmiths

A service to Distinguished, General and Student members of the Society of North American Goldsmiths

20% discount on most books in publication, plus $2 postage and handling eg:
Jewelry Concepts and Technology
by Oppi Untracht
Members price $50.

Write for a comprehensive listing. Please use this order form when ordering.

All inquiries and orders to:
Glenice L. Matthews
SNAG Book Department
431 South Crestway
Wichita, KS 67218

NAME _____
ADDRESS _____
CITY _____
STATE _____ ZIP _____

Author _____
Publisher _____
Title _____
List Price _____ Quantity _____
Discount Less 20% _____
Postage & Handling $2.00 per book _____
TOTAL PRICE _____
check enclosed, make check payable to SNAG _____

THIS COUPON CAN MAKE A BIG DIFFERENCE IN YOUR LIFE

If you are not already a regular reader of THE CRAFTS REPORT, now is the time to join thousands of the country's finest professional craftspeople, shop and gallery owners, teachers, show managers, and crafts administrators who stay on top of the news and information that makes their lives more successful and rewarding. All the news and activities of the contemporary crafts world.

Every issue is packed with valuable information: how to sell, where to sell, how to save on taxes, how to manage the "business side" of your craft activities, how other craftspeople do it, how to earn a better living in crafts.

All of this is designed to take the hassles out of the "business side" of your life so that you can devote more time to your craft work and less time to your paperwork.

Discover what other readers have found — as few as two or three good sales contacts through the "Crafts Wanted" or "Crafts Available" sections and you have your subscription investment back many times over. Every year you'll see literally hundreds of solid money-making or money-saving opportunities you find nowhere else but in THE CRAFTS REPORT, the only monthly newspaper in the crafts field.

THE CRAFTS REPORT
700 Orange St., PO Box 1992, Wilmington, DE 19899

MS

YES! Please send THE CRAFTS REPORT regularly every month. Enclosed is my check for
☐ $16.75 one year (11 issues)
☐ $30.75 two years (22 issues)

Name _____
Business Name (if any) _____
Address _____
City _____ State _____ ZIP _____

ARTISTIC IMPORTS, INC.
105 W. Riverside, Suite 124
Austin, Texas 78704
512/472-4490

NOW AVAILABLE . . . .
THE HIGHEST QUALITY UNIQUE, CUSTOM-MADE SQUARE STERLING SILVER BEADS

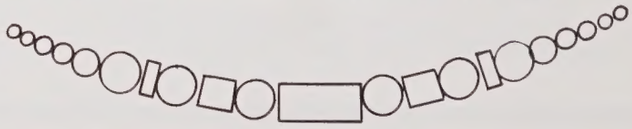
CUBE | DOUBLE CUBE | TRIPLE CUBE | HALF CUBE

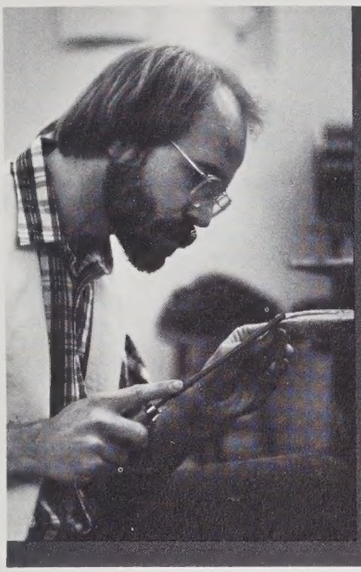
Our square beads are excellent for mixing with round beads to give added elegance to your creations.

All our beads are hollow and completely handmade from the finest sterling silver. Choose from 24 different affordable styles and sizes. Our minimum order is $100.

We also wholesale extraordinary sterling silver jewelry: chokers, bracelets, earrings, etc.

Let our representative call you or mail our catalog to you. Just write or call toll-free 800-531-5255 (in Texas 800-252-9146) ext. 180.





Tim McCreight
author of
Metalworking for Jewelry
and
The Complete Metalsmith
and instructor

Professional Craft Studies Program

write or call for brochure

Worcester Craft Center

25 Sagamore Road
Worcester, MA 01605

617 753-8183

Highest Quality, Lowest Prices!

- TITANIUM
- NIOBIUM
- ALUMINUM
- ALUMINUM DYES
- RECTIFIERS

TITANIUM		NIOBIUM	
Grade#1 CP Metal			
Sheet	26 ga.	Sheet	16 ga.
	40 ga.		20 ga.
			24 ga.
Wire	2 ga.	Wire	8 ga.
	4 ga.		18 ga.
	6 ga.		20 ga.
	14 ga.		24 ga.
	18 ga.		26 ga.
	20 ga.		
	24 ga.		
	26 ga.		
	¼" square		

Met-L-Art, Inc.

(302) 475-1906 ALL METALS ARE FULLY ANNEALED

2311 Woodland Lane Arden, DE 19810

We don't have a line of our own to sell
We devote our...Quality, Dependability, Service

A FULL CASTING SERVICE

We don't have a line of our own to sell. We devote our skills to your needs, whether they be casting of your handmade wax design or for mold reproduction. We offer silicone as well as regular rubber molds, so the materials your models can be made of are almost limitless!

Write us concerning the details of your designs and your casting needs. All work is done in strict confidence and with top security for your designs.

Billanti Casting Co., Inc.

Boston Findings & Jewelers Supply

- **—14K findings, American manufactured, heavy and medium weights available.**
- **—Sterling silver and gold-filled findings.**
- **—Jewelers' tools and supplies.**
- **—Fine quality and unusual gems offered to designers.**
- **—Large inventory of Art Nouveau and Deco stones for antique jewelry restoration.**

TOLL FREE NUMBERS: NORTHEAST 800-225-2436
MASS. RESIDENTS 800-882-1226

SEND $2.00 FOR OUR NEW FINDINGS CATALOG TO:

BOSTON FINDINGS CO.
Dept. MSC
387 Washington St.
Boston, MA 02108

NAME _____

ADDRESS _____

CITY, STATE, ZIP: _____

CLASSES
WORKSHOPS
EXHIBITIONS

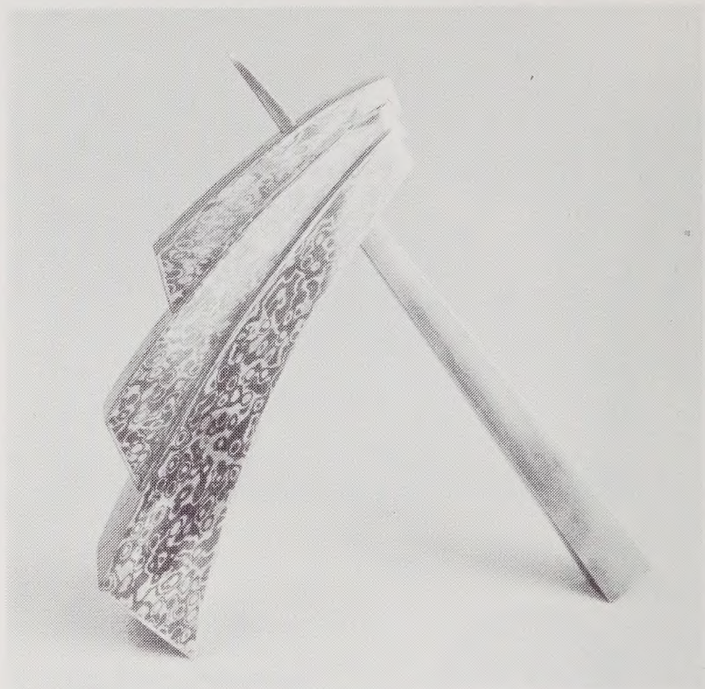
southwest craft center

AMY SPENCER
PAT FLYNN
JUDY & MART BALLINGER
MARTHA BANYAS
CLAIRE HOLLIDAY

Ceramics
Fibers
Photography
Jewelry
Papermaking
Drawing &
Painting
Video

Call or write
for a brochure
300 Augusta St.
San Antonio, TX
78205-1296
(512) 224-1848

APPALACHIAN
CENTER FOR CRAFTS



"Pierced Stack" Forged steel, mokume-gane by Bob Coogan

Professional studies in metals offering Bachelor of Fine Arts and Bachelor of Science degrees, certificate programs, graduate courses and apprenticeships. For more information, contact Bob Coogan, Master Craftsperson in Metals, Appalachian Center for Crafts, Rt. 3, Box 347 A-1, Smithville, TN 37166.

GEM STONES

You need them for your total jewelry program. Send for a large selection of precious & semi-precious stones. Priced for student craftsmen.

OPALS GARNETS STARS LAPIS JADE MOONSTONES TOURMALINE SMOKY QUARTZ CORAL PEARLS and many more. Keep stones for 30 days.

Send back any or all and pay for stones you want to keep. Why buy from a catalogue?

Special Orders Available
Send Orders on
School Stationery

Kenneth F. Rose
GEMS
P.O. Box 84 M
Southfield, Mich. 48037

PENLAND'S BEST KEPT SECRET:
6-WEEK FALL CONCENTRATION IN METAL WITH MARVIN JENSEN. OCTOBER 14—NOVEMBER 22.

Hear what students from Spring Concentration are saying.....

☐ *"Only program of its kind around. Eight weeks to zero-in on one subject in an intimate atmosphere with one-to-one contact with the instructor. Endless possibilities!"*

☐ *"Learning from the example of others who sit patiently exploring in the silence."*

☐ *"Practice with no immediate pressure to produce for a market or a grade. Encouragement to develop skills in seeing, for deeper perception of our own and others work."*

Concentration...Penland's answer to continuing education. Spring and Fall programs for undergraduate or graduate credit.

PENLAND

■ **Clay—*Al Kluber*** ■ **Glass—*Richard Ritter/Mark Peiser/Jack Schmidt/James Nadal*** ■ **Metal—*Marvin Jensen*** ■ **Photography—*Anna Tomzak*** ■ **Stone Masonry—*Tomas Lipps/Joe Kenlan*** ■ **Weaving & Surface Design—*Lin Fife*** ■ **Wood—*Bob Trotman.***

PENLAND SCHOOL, Dept. F5, Penland, NC, 28765, 704/765-2359

Classified

Rates: Minimum 15 words—$15. After that, $1.25 per word (abbreviations, initials count as full words). When figuring number of words, be sure to include name and address.
Payment: Full payment must accompany each order. Make checks out (in US Dollars only) to: *Metalsmith*, Classified. Mail payment and copy to Metalsmith Classified, David Freda/Holly Hutchins, P.O. Box 215, Lake Katrine, N.Y. 12449, telephone (518) 537-4719.
Agency Commission: No agency commission on classified advertising.
Deadlines: Ads must be received by the first of the month, two months prior to issue date (i.e., July 1 for Fall issue; October 1 for Winter issue; January 2 for Spring issue; April 1 for Summer issue).

NEW YORK – SOHO GALLERY is looking to show exceptional Metal works. Please send 3 slides and $10.00 non-refundable screening fee to: ARIEL GALLERY, 76 Greene St. N.Y.C. 10012

REACTIVE METALS STUDIO

TITANIUM NIOBIUM TANTALUM

Specially milled jewelry grade sheet and wire

EXCLUSIVE! TITANIUM & NIOBIUM FRENCH EAR WIRES

Heavy 20 guage stock, tumbled smooth, hypoallergenic

Also available in 12/20 gold filled. 10 to 10,000 pieces

SHAKUDO

COPPER/GOLD ALLOY

SHIBUICHI

SILVER/COPPER ALLOY

MOKUME-GANE

26 fused layers of either copper/silver or copper/brass

From Shining Wave Metals. Made in U.S.A.

SPECIALTY MATERIALS

Micro-finishing films & polishing papers; miniature nuts & bolts; abrasive airbrush kits; the only current limited anodizers

We carefully protect and hand package all shipments.

Most orders filled within 24 hours. We gladly ship worldwide.

FREE CATALOG

Call or write

BOX 425/Jerome, AZ 86331

602-634-3434

ENAMELS

ENAMELING

ENAMELISTS

by Glenice Matthews

A complete enameling book for beginners and experts alike. Covers subjects including cloisonne, limoge, wet packing, sgraffito, stencils and a chapter on troubleshooting problems. Also an A-Z reference quide for 26 enameling techniques with examples. Over 130 photos of finished enameled pieces along with a color section and many process photos. Hardcover, 180 pages, $21.95.

OTHER BOOKS AVAILABLE

JEWELRY CONCEPTS AND TECHNOLOGY by Oppi Untracht (Hardcover, 807 pgs. — newly released) $60.00

THE ART OF ENAMELING by Margaret Seeler (Softcover, 136 pgs.—reprint of old book) $10.95

A MANUAL OF CLOISONNE & CHAMPLEVE by Strosahl (Hardcover, 196 pgs.—has much Schauer info) $35.00

CLOISONNE: The Art of Cloisonne Enameling and Jewelry Making by Liban & Mitchell (Hardcover, 256 pgs.) $25.00

To order books, send check or money order. Include $2.00 shipping for 1st book and 75¢ for each additional book. Free catalog of enameling supplies with book order.

CATALOG ONLY send $2.00 (refundable on 1st order) Color charts are 50¢ each extra. Specify for Thompson or Schauer enamels.

Metal Crafters Supply Co., Dept. MSB
117 Reservation Rd., Sunderland, MA 01375

Helping You Sell Your Crafts Is What We're All About

The Quality Crafts Market

THE BUSINESS MAGAZINE FOR CRAFTSPEOPLE

Devoted *entirely* to giving you information you need to sell to Crafts Shops, Galleries, Dept. Stores and on Architectural Commission.

In Every Issue:

- Shop, Gallery and Dept. Store buyers describe crafts they are now looking for;
- Exclusive architectural commission contacts;
- Business management articles on pricing, consignment, promotion, etc...
- QCM Master Business Forms.®

The Quality Crafts Market
THE BUSINESS MAGAZINE FOR CRAFTSPEOPLE
15 West 44th St.
New York, NY 10036

YES. Please enter my subscription for:

☐ 1 year (6 issues), $20. ☐ 2 years, $35 ☐ 3 years, $50

Canada: Add $5 for each year. Outside U.S. and Canada: add $20 per year (air mail). Payment must be made in U.S. funds.

☐ My check or money order is enclosed.

☐ Please charge to: ☐ Visa ☐ Mastercard

Card # _____ Expires_____

Name _____ Phone( )_____

Address _____

City, State, Zip _____

Jewelry Production?

Save overhead, Equipment cost,
Personnel problems
with custom production in
die stamping, casting, hard fired enamel

Prompt Delivery

CALL 206 624-0013

west earth

406 Dexter Ave. N., Seattle, WA 98109

Visit our Production Showroom 10 a.m. - 4 p.m. Mon. - Sat.

SOCIETY OF NORTH AMERICAN GOLDSMITHS

The Society of North American Goldsmiths (SNAG) was formed in 1970 to promote contemporary gold- and silver-smithing. SNAG serves as a forum for the free exchange of ideas in the field.

Technical information, aesthetic and educational issues, and other topics of interest to the practitioner and teacher of contemporary metalwork are disseminated by SNAG publications and conferences. Professionals and students, collectors, gallery owners, and enthusiasts will all find SNAG interesting and useful. From pure sculpture to production jewelry, SNAG offers information on the entire range of the exciting field of metalsmithing.

Services

Each year, SNAG conducts a conference that attracts jewelers and silversmiths from all over the world. Major figures in the field speak on a multitude of topics. Each conference is held in a different location to allow the widest audience possible access to these lively and stimulating gatherings.

Periodically, SNAG sponsors major exhibitions of contemporary metalwork. In the past, SNAG shows have been mounted at the Renwick Gallery, the St. Paul Museum of Art, and the Phoenix Museum of Art. A special exhibition of work by Distinguished Members travelled to major museums in Europe in 1979.

The Society operates a book ordering service, through which important texts on all aspects of the field can be ordered at a reduced price.

SNAG also operates a slide library and rental service, which contains the portfolios of Distinguished Members and other notable metalsmiths. Members can rent or purchase slides at minimal cost.

Publications

Metalsmith is the only magazine in America devoted solely to the metal arts. Prominent jewelers and designers, silversmiths, blacksmiths, and sculptors are featured in full-length articles. Process and technique are explored in essays on design and production, materials and equipment. Regular columns by leading authorities discuss the latest gallery shows, newest books, and current museum exhibitions.

The Newsletter is published bimonthly, and is available to members only. It features timely information on exhibitions, workshops, conferences, and job opportunities from all across the U.S. and Canada.

SNAG has also published *Metalsmith Papers*, a book which collects important new information on materials and techniques. It is available to members at a reduced price.

Membership

SNAG offers several types of memberships, each tailored to a specific level of involvement in the field of contemporary metalsmithing.

1. General Membership is open to all, and offers subscriptions to *Metalsmith* and the Newsletter, reduced conference fees, voting rights, and access to all of SNAG's services.
2. Student Membership is offered at a reduced fee to anyone attending an accredited educational institution. This category includes subscriptions to *Metalsmith* and the Newsletter, but does not carry voting rights.
3. Distinguished Membership is a special juried category, which is offered only to North American applicants who demonstrate outstanding contributions to the field. Applicants are juried twice a year.

In addition, there are two other categories: Institutional Membership for non-profit organizations like schools or libraries, and the Honorary Membership, which recognizes extraordinary contributions to the field.

Our organization is only as good as its membership. Join with metalsmith colleagues in North America to build a vital network of information and support.

General and Student Memberships: receive four issues of *Metalsmith* magazine and six issues of the SNAG newsletter, plus discounts on SNAG Audio/Visual services and books on metalsmithing; reduced rates for SNAG's annual conference.

Institutions: receive four issues of *Metalsmith* magazine.

Make checks payable to SNAG (in U.S. dollars only). Contributions are deductible within legal limits for income tax purposes. Allow six to eight weeks to receive your first copy of *Metalsmith*.

Clip out application panel and mail to:

SNAG
6707 North Santa Monica Blvd.
Milwaukee, WI 53217

Please enter me as a member of SNAG as follows:

$45	☐	General Membership
$30	☐	Student Membership
$45	☐	Institutions (U.S., Canada)

Foreign Membership add:

$ 6	☐	Surface mail
$10	☐	Air Mail: Mexico
$15	☐	Air Mail: South America and Europe
$20	☐	Air Mail: Asia, Australia

$_____ Amount enclosed

Name _____

Address _____

_____

City/State/Zip _____

GIVE METALSMITH AS A GIFT AND BE REMEMBERED ALL YEAR ROUND

SNAG + Metalsmith

Please enter me as a member of SNAG as follows

- $45 ☐ General Membership
- $30 ☐ Student Membership
- $45 ☐ Institutions (US, Canada)
- $ 5 ☐ Metalsmith Papers

Foreign Subscriptions add:

- $ 6 ☐ Surface mail
- $10 ☐ Air Mail: Mexico
- $15 ☐ Air Mail: South America & Europe
- $20 ☐ Air Mail: Asia, Australia

_____ ☐ Amount Enclosed
☐ Please bill me.

☐ New Membership
☐ Renewal Membership

I am a:

- ☐ Practicing Metalsmith
- ☐ Teacher
- ☐ Student
- ☐ Gallery Owner
- ☐ Curator
- ☐ Collector
- ☐ Interested Observer
- ☐ Other

Please limit information below to boxes provided.

Name

Address

City State Zip

Telephone

Mail to: SNAG
6707 N. Santa Monica Blvd., Milwaukee, WI 53217

PLACE POSTAGE HERE

METALSMITH
SOCIETY OF NORTH AMERICAN GOLDSMITHS
6707 N. SANTA MONICA BLVD.
MILWAUKEE
WISCONSIN 53217

PLACE POSTAGE HERE

SOCIETY OF NORTH AMERICAN GOLDSMITHS
6707 N. SANTA MONICA BLVD.
MILWAUKEE
WISCONSIN 53217

Metalsmith

Please enter my subscription

$20 ☐ United States, Canada & Foreign Subscriptions One year (4 issues)

Foreign Subscriptions add:
$6 ☐ Surface mail
$10 ☐ Air Mail: Mexico
$15 ☐ Air Mail: South America/ Europe
$20 ☐ Air Mail: Asia/Australia

I am a:
☐ Practicing Metalsmith
☐ Teacher
☐ Student
☐ Gallery Owner
☐ Curator
☐ Collector
☐ Interested Observer
☐ Other

_____☐ Amount Enclosed
☐ Please bill me.

Please limit information below to boxes provided.

Name

Address

City State Zip

Telephone

Mail to: Metalsmith
6707 N. Santa Monica Blvd., Milwaukee, WI 53217

Metalsmith

The Quarterly Magazine Devoted to the Development and Appreciation of the Metal Arts

Traditions of Metalwork
Historical articles trace the roots and development of metalwork in the styles and artists of the past.

Materials & Methods
An inside look at the precious and nonprecious materials and the unique methods of metalsmithing and jewelry.

Showcase of Contemporary Work
Each issue will seek out and explore significant new work in the fields of jewelry, enameling, holloware, blacksmithing and sculpture.

Masterpieces in Metal
Curators of well-known museums and collections from around the world examine important works, commenting on their technical, historical and esthetic significance.

Exhibition Reviews
Each issue selects the most important shows for review. The emphasis is on a visual presentation of the major pieces and a critical appraisal of their contribution to the contemporary body of work being created in the field.

Business, Marketing and Education
- Where to find summer workshops and programs in metal
- How to market through galleries, stores and direct mail
- What books and other literature to read
- How to avoid health and safety hazards
- Where to get supplies
- How to photograph your work
- How and when to enter competitions
- How to establish your own retail business
- How to evaluate craft fairs

Master Metalsmiths
In-depth profiles of eminent metalworkers examine their contribution to and influence on the state of the art. They are the designers, teachers, artists of today, whose work is sought by collectors and admired by craftsmen.

Since **Metalsmith** is a quarterly, please allow 8 to 10 weeks to receive your first copy.

Contributions are deductible with legal limits for tax purposes.

Make all checks (in U.S. funds only) payable to **Metalsmith**.

Buffs
Counter Balance
Vulcanizers Zam Spectacle
Tongs Abrasive Wheels Tumbling Media Rubber
Rotary File Compressors Hammers Optivisors Zam
Workbenches Belt Sander Diamond Dresser Helios Gauge Chasing
Talc Wax Injectors Tripod Caliper Gauges Cuttlefish Bone
Pliers Engraving Saw Frames Giles Wax Tool Wax
Files Magnifiers Teflon Metal Dispenser
Safety Saw Solder Paste Polish
Acid Solder Squares
Gravermeister
Shot Diamond
Steel Mandrel
Antiflux
Oven

Twist Drills
Spray Release
Dust Respirators
Aluminum Oxide Points
Binding Wire Blowpipe
Escapement Files Bench Cutter
Casting Kit Metals Electroformer
Balance Scales Flux Felt Split Laps Blades
Arbor Devcon Palm Grip Pliers Charcoal Block
Asphaltum Varnish Scotch Stones Gold Test Kits
Regulators Rulers Wax Sawblades Cement Fabulustre
Belts Electroformer Vises Rolling Mills Gloves Knife Edge Buffs
Marking Machine Hard Solder Flux Felt Split Laps Saw Blades
Bench Vises Motor Arbor Devcon Palm Grip Pliers Brass Brush
Scales Methyl Alcohol Ochre Investment Scoops Free Gift Program
Diamond Polishing Alligator Clips Polishing Belts Stirring Rod
Pickle Pots Ring Soldering Tweezers Degree Gauge Bowls
Torch Torit Dust Collectors Ring Bender
Wire Brushes Wet Belt Sander
Diamond Dresser

For Your FREE All Color Tool Catalog
Just Call Toll Free 1-800-545-6566

Rio Grande Albuquerque 6901 Washington N.E., Albuquerque, NM 87109 1-(505) 345-8511

PHOTO: MARK ROCKWOOD

Etienne

Camden, Maine 04843 207-236-9696

Triple Loop Bracelet
Michael Good, Designer
11.50 ct Diamonds